

# WINDEV®

26  
NEW FEATURES

- HTML
- Split view
- 10 new Smart controls
- Native OCR
- 3x faster compilation
- HFSQL: asynchronous queries
- Non-blocking required input field
- Map control: automatic cluster
- Two-factor authentication
- Private store, MDM
- Vue.js, React, Angular, Node.js
- TypeScript in WEBDEV
- Web print
- Import Wordpress templates
- WebSocket server
- New WEBP image format
- +300 WLanguage functions
- Windows, iOS, Android, Web, Java, PHP...

NEW VERSION

# 26



DEVELOP 10 TIMES FASTER



# 26

**Version 26** brings you an incredible amount of ready-to-use innovations. HTML integration, new WLanguage functions, asynchronous queries, split view, Map control, native OCR, Modbus, Websocket server...

Version 26 brings your teams 926 essential new features.

Build on your existing experience while taking advantage of new technologies and new tools: this is the benefit provided by version 26.

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

WINDEV 26, WEBDEV 26 and WINDEV Mobile 26 are your work tools. The main objective of our teams is your satisfaction and success, on all environments and hardware platforms.

Version 26 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 26. To discover the thousands of features of each product, consult their respective documentation (at WINDEV.COM, or printed brochure on demand).

**926**  
NEW FEATURES

**ORDER  
VERSION 26  
TODAY!**



## NEW HTML CONTROL: DISPLAY, CREATE, EDIT, SEND, PROGRAM A UNIVERSAL NECESSITY

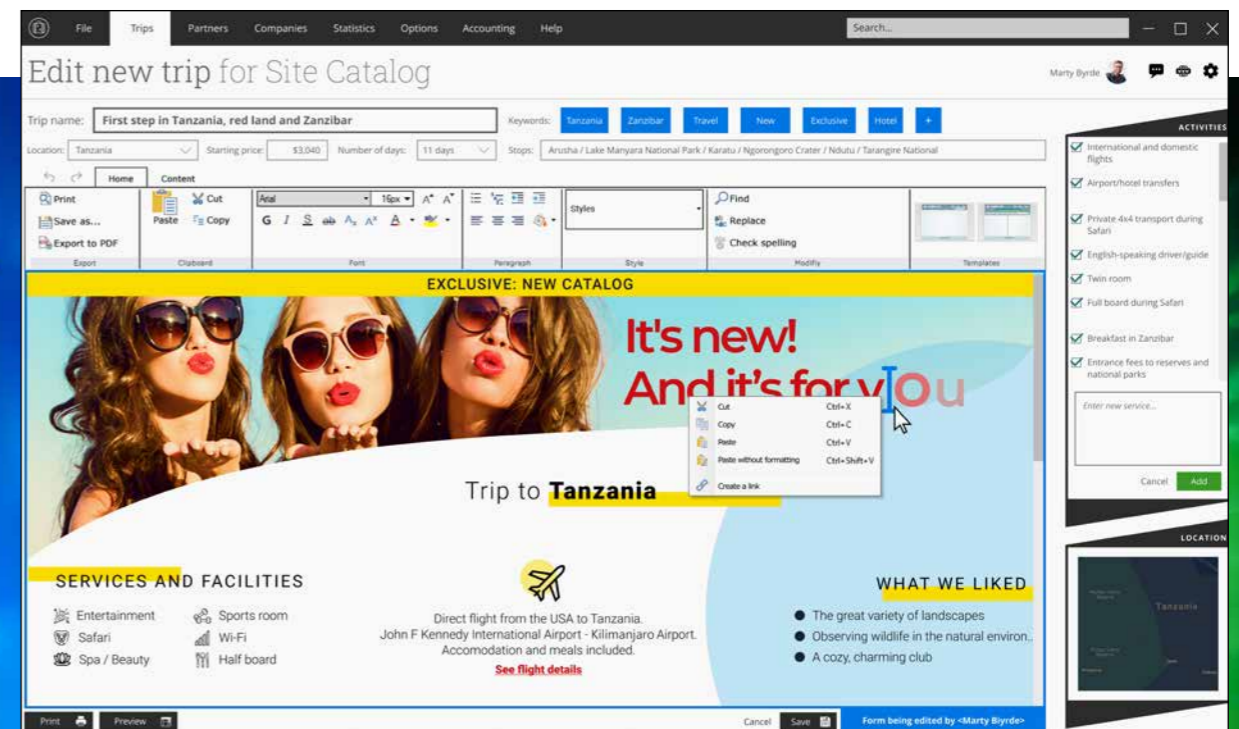
### 001 New feature WD WB WM HTML: A UNIVERSAL NECESSITY

The new features of the new HTML control in version 26 bring you infinite power and functionalities. The new control is based on Chromium and uses the latest HTML technologies. Your applications will display web pages (Part 1), your appli-

cations will generate HTML pages, your users will create or modify their HTML pages (Part 2), your applications will offer standard email management functionalities (Part 3), you will easily program powerful processes for analyzing the contents of web pages (Part 4).

Whether it's on Windows, Internet, Android or iOS, you're going to make the most of HTML.

**Benefit provided by this new feature of version 26:**  
*HTML forever*





# PART 1 HTML DISPLAY CONTROL: PERFECT RESULTS

## 002 New feature WD WB WM NATIVE HTML DISPLAY CONTROL: PERFECT RESULTS

THE HTML CONTROL IN VERSION 26 SUPPORTS 200 ADDITIONAL FUNCTIONALITIES:

- Responsive
- jQuery
- Bootstrap 4
- round borders
- gradients
- hint text in input controls
- transition effects
- animations
- CSS selectors by multiple classes
- pinned control
- anchors
- etc.

The HTML Display control is used to display a web page. For example, in 1 line of code, without using an external browser, your WINDEV applications can display a page of a website: help, news, technical documentation...

The HTML Display control in version 26 perfectly displays all HTML documents, created with WINDEV, WEBDEV or WINDEV Mobile or any other editor.

The latest tags are supported.

CSS style sheets are supported.

The Javascript code that may be present in the HTML content is interpreted, if you allow it.

The control displays either HTML content (a file) or remote content from a URL.

**Benefit provided by this new feature of version 26:**  
Display modern HTML pages

## 003 New feature WD WB WM HTML DISPLAY CONTROL: CHROMIUM TECHNOLOGY

The control from earlier versions was based on Internet Explorer ActiveX.

The HTML Display control in version 26 uses Chromium, and does not require any external resources to operate: no ActiveX, no dependency on the Windows version or the browser installed on the user's machine.

**Benefit provided by this new feature of version 26:**  
Perfect results

## 004 New feature WD WB WM A WEB BROWSER IN YOUR APPLICATIONS

Version 26 includes the source code of a browser.

You can use, modify and customize this code to include it in your applications.

Using this type of browser will ensure that your pages will be displayed in the same way for all your users.

This browser also allows you to define a list of the sites that

# HTML, A UNIVERSAL NECESSITY

## CONTROL

- Display existing HTML documents
- Write emails
- Create HTML pages: product form,...
- Easily integrate a WEBDEV page into a WINDEV application
- Format text for multiple platforms
- Get rid of RTF!

## PROGRAMMING

- Generate static HTML content: custom emails, surveys, catalogues
- Add rows to an existing HTML table by programming: prices, sizes, ...
- Insert HTML controls in an HTML document
- Change control styles: out-of-stock product...
- Convert an HTML document to another format: Docx, RTF, XML, JSON, raw text...
- Analyze HTML content; for example, get prices for a product or hotel room from multiple sites to select the best offer
- Navigate through the controls of a page to retrieve data
- Retrieve the content of an invoice displayed on a site
- Retrieve or modify a page's background color or image
- ...

can be opened, which can be useful in a professional environment.

**Benefit provided by this new feature of version 26:**  
Same results for all users

## 005 New feature WD WB WM HTML DISPLAY CONTROL: AUTO FILL WEB FORM BY PROGRAMMING

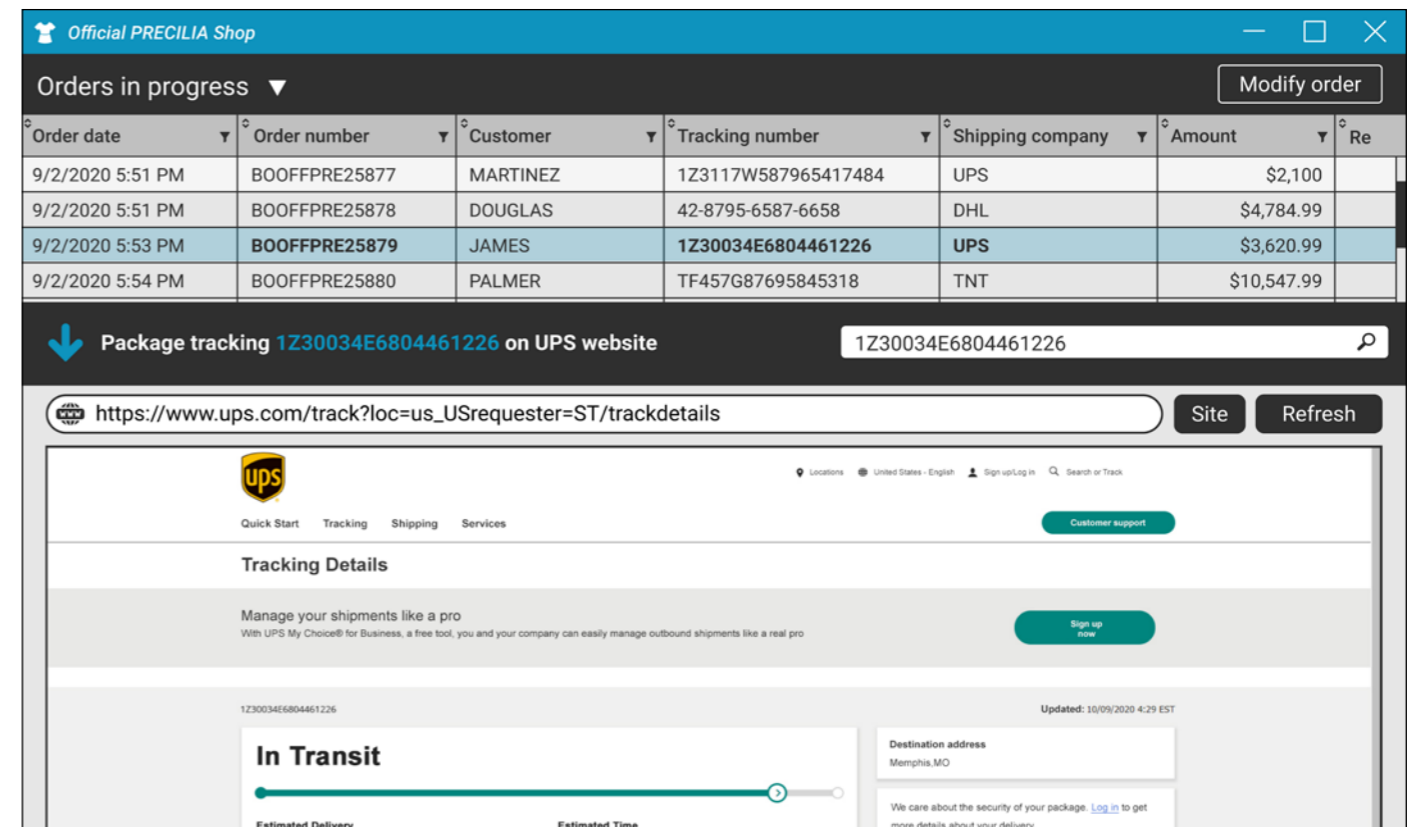
The manipulation of the HTML "control" by programming should not be confused with the manipulation of HTML "code" by programming (Part 4).

An application may need to interact with the content of the page:

- Trigger the click on a button by programming to automatically display the next page
- Fill out a form by programming
- ...

The HTML Display control in version 26 comes with new WLanguage functions:

- Fill out an edit control
- Fill out a form control
- Click a button
- Get the value of a field in a form



HTML view control (bottom of the image): it retrieves a package tracking number and displays a delivery tracking site

- Identify a control
- Click a radio button or check box
- Click an option in a check box
- ...

**Benefit provided by this new feature of version 26:**  
Control your pages with ease

## 006 New feature WD WB WM HTML DISPLAY CONTROL: AN HTML BUTTON CAN EXECUTE WLANGUAGE CODE

An HTML Display control can trigger the execution of WLanguage code (from a button, etc.). This WLanguage code is present in the window that contains the HTML control.

In the Javascript code of the HTML button, simply call `WL.Execute`, passing the WLanguage procedure and its parameters. The WLanguage function called from the JavaScript code can take several parameters.

If necessary, you can call JavaScript code contained in the page from the WLanguage code.

**Benefit provided by this new feature of version 26:**  
Code, code, code!

## 007 New feature WD WB WM NEW EVENTS

New programming events are introduced to manage and customize the HTML Display control. They are added to existing events.

- **Load resource**

This event is used to filter the loading of an element in the page before being downloaded.

For example: prevent loading resources that are on another domain or on unauthorized or blacklisted domains; prevent loading tracking images, etc.

- **Change page**

This event makes it possible to be notified before requesting a new page, or to memorize the sequence of pages viewed.

- **Right click on a link**

It allows displaying a popup menu, for example. It can also be used to prevent changing to another page.

- **Handle content of HTML control**

The HTML control can be linked to an HFSQL data file (or other): it can be "binded". The binding can be created on the whole page or on a part of the page.

This can be useful for managing product forms, for example.

**Benefit provided by this new feature of version 26:**

Quite an event

## 008 New feature WD WB WM HTML DISPLAY CONTROL: MISCELLANEOUS

- 3 new properties are introduced: `..URL`, `..Document`, `..PopupMenu`.
- JavaScript code is executed in a secure environment ("sandbox").
- Advanced management of 4K display.
- The outline of the control can be configured.

**Benefit provided by this new feature of version 26:**  
Feature-rich



## PART 2 NATIVE HTML EDIT CONTROL: AN HTML EDITOR IN YOUR APPLICATIONS

Version 26 also offers a completely new HTML Edit control. The HTML Edit control allows users to create and modify HTML pages. This edit control is extremely useful. For example, it is possible to manage product forms directly in HTML in the Back Office using a WINDEV application, then have them automatically published on the website.

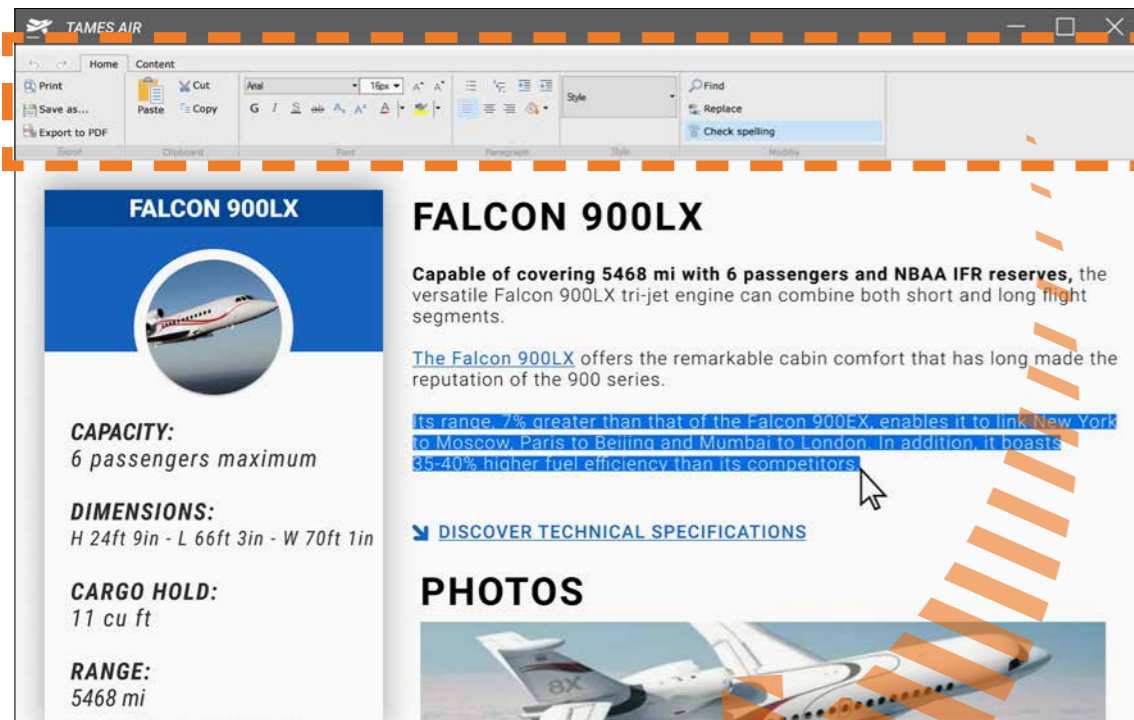
### 009 New feature WD WB WM HTML EDIT CONTROL: FEATURE-RICH

The HTML Edit control in version 26 uses the latest HTML standards. All HTML functionalities are recognized and can be used. CSS code included in the HTML content is managed natively.  
**Benefit provided by this new feature of version 26:**  
*Your texts are always in style*

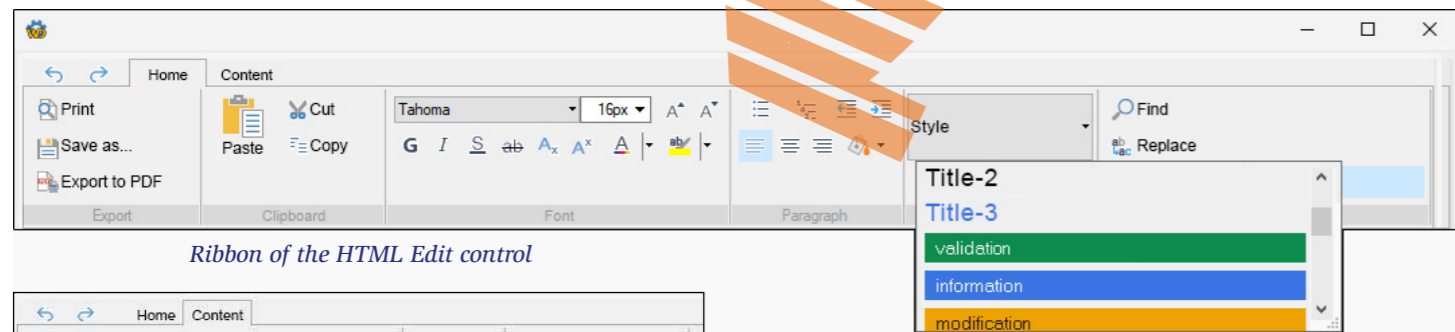
### 010 New feature WD WB WM HTML EDIT CONTROL: FEATURES

The edit control has an integrated ribbon. You have nothing to program in your application. The look and features of this ribbon can be customized (you can add buttons and panes). Default options include:

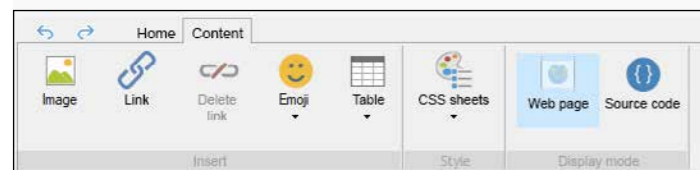
- font, size, color
- bold, italic, underline, strikethrough...
- import CSS styles
- image management: move, crop, resize, rotate...
- edit links
- undo/redo
- copy/paste raw text, RTF, Docx, HTML
- paste without formatting
- save
- print
- export to PDF
- emojis
- alignment
- indent
- tables
- spelling checker
- find/replace
- ...



A page being edited... in the HTML Edit control



Ribbon of the HTML Edit control



Content tab

**Benefit provided by this new feature of version 26:**  
*A powerful ribbon*

Continues page 8...

## PART 3: HTML EMAIL CONTROL

### 011 New feature WD WB WM HTML EMAIL EDIT CONTROL

Version 26 features a new, email-specific HTML Edit control. This control allows your applications to include WYSIWYG rich text input using the HTML standard, which can then be recognized and displayed by all email providers. The created HTML document can be stored in memory or on disk.  
**Benefit provided by this new feature of version 26:**  
*A powerful, easy-to-use control*

### 012 New feature WD WB WM THE SECRETS OF EMAIL TEXT

It is important to know that emails cannot contain all standard HTML or CSS elements. Each email provider (Gmail, Yahoo, Outlook, Thunderbird, Courier, etc.) has its own limitations. To be interpreted correctly, an email can only contain a subset of the HTML and CSS functionalities. For example, Gmail does not support SVG and HDR images or <video> tags, Outlook does not support "Submit" buttons or HTML 5 Doctype, Yahoo does not support anchor links, etc. The HTML Email control in version 26 only allows the use of the functionalities supported by all email providers: the emails

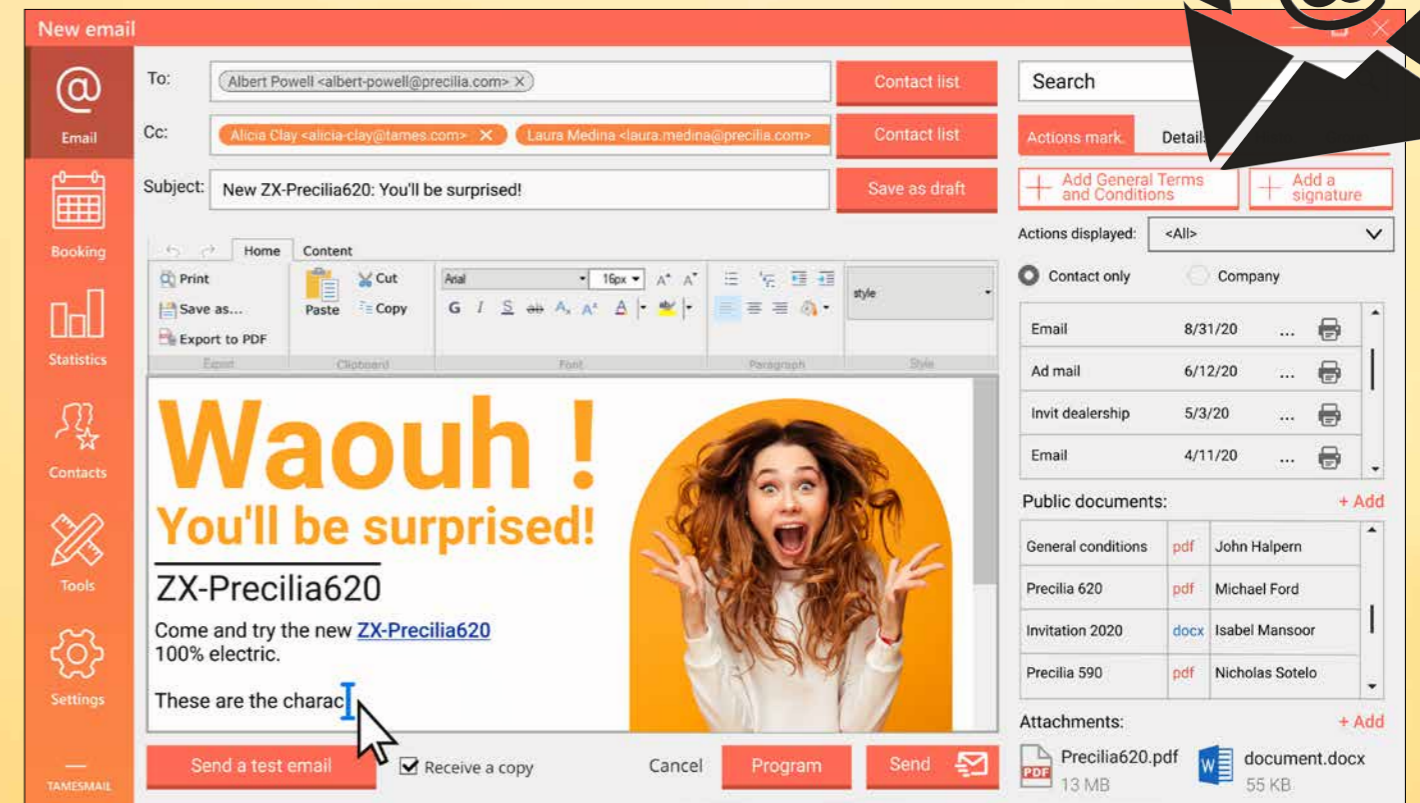
created with your applications will be displayed correctly!  
**Benefit provided by this new feature of version 26:**  
*Emails will be displayed correctly by all email providers*

### 013 New feature WD WB WM EMAIL CONTROL: IMAGES

Images in the HTML Email control are included as attachments (images encoded in base 64 are not supported by email providers).  
**Benefit provided by this new feature of version 26:**  
*Images are supported*

### 014 New feature WD WB WM EASIER EMAIL MANAGEMENT

A comprehensive email management example, based on the HTML Email control and including the WLanguage source code, is provided in version 26. For example, when replying to an email, the original message is automatically copied and indented below the reply text. Signatures can also be inserted automatically. Your applications will get a big boost, effortlessly!  
**Benefit provided by this new feature of version 26:**  
*Your applications will easily manage emails*



With this example, you can effortlessly include advanced email features in your applications



## 015 New feature WD WB WM HTML EDIT CONTROL: SWITCH FROM WYSIWYG MODE TO SOURCE MODE

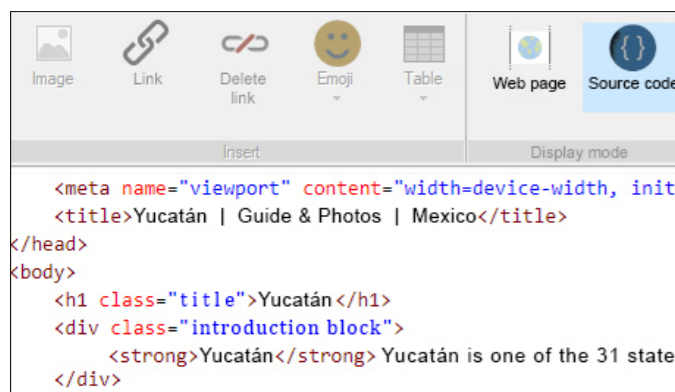
The HTML control allows you to write HTML code in WYSIWYG mode.

For advanced users (or for copy/paste masters), it is possible to switch to source mode at any time, to view HTML tags.

This makes it possible, for example, to declare a CSS sheet, insert a particular tag, paste a code snippet...

In the source mode, it is also possible to write (or paste) JavaScript code.

HTML code is stored in UTF-8 format, and is viewed in WYSIWYG mode.



HTML code in source mode

Note that accented characters are displayed directly (UTF-8).

Benefit provided by this new feature of version 26:

WYSIWYG or source mode, it's up to you

## 016 New feature WD WB WM HTML EDIT CONTROL: NEW WLANGUAGE FUNCTIONS

The HTML Edit control is usually embedded in a window that provides automatic functionalities on the HTML content being entered, often via buttons: insert text defined by programming, insert a quote, format and insert data from the current window, insert a signature, insert a logo, position the cursor, preselect text.

Several WLanguage functions have been introduced for this purpose in version 26.

**HTMLEditorFormatSelection:** Applies formatting to the selected text: bold, italic, underlined, size, font, CSS style...

**HTMLEditorInsert:** Inserts text or HTML code at the cursor position. If a portion of text is selected, it will be replaced.

**HTMLEditorInsertTable:** Inserts an empty table at the cursor position. The number of rows and columns must be specified as parameter. The end user can edit this table using the mouse.

**HTMLEditorSelect:** Positions the cursor.

Benefit provided by this new feature of version 26:

WLanguage has everything you need

## 017 New feature WD WB WM HTML EDIT CONTROL: NEW EVENTS

New events are introduced to finely manage this HTML Edit control.

- **Selection**

This new event is called each time the user selects an element in the HTML document.

The new **htmlSelection** WLanguage type allows you to get information on the selected elements: selected word...

- **After loading the page**

This new event is called once the page has been fully loaded. This is useful, for example, to start an automatic page analysis.

- **Load resource**

This new event is called each time the page downloads an element: image, file... It allows you to check and prevent a download if necessary.

- **Whenever modified**

This new event is called each time the user makes a modification in the page: input, etc.

Benefit provided by this new feature of version 26:

State-of-the-art programming

## PART 4 NATIVE TYPE TO HANDLE HTML SOURCE

## 018 New feature WD WB WM NATIVE PROGRAMMING

WLanguage allows you to handle, read and enrich an HTML document by programming, without a UI.

Two native types, 2 new functions and 285 new syntaxes (see page 50) allow you to handle HTML source code, build a document from scratch, modify an existing document, add tags, search and modify content, add images and tables, etc.

You can natively access each node in the HTML tree.

You can also create or modify JavaScript code in the HTML document.

Local CSS styles can also be handled by programming in version 26.

Benefit provided by this new feature of version 26:

Hundreds of lines of code saved

## 019 New feature WD WB WM 2 NATIVE TYPES TO HANDLE HTML DOCUMENTS

Version 26 offers advanced possibilities to handle HTML: 2 WLanguage types are introduced.

These native types allow you to perform all operations on ex-

isting or new HTML documents.

The native **htmlDocument** type is used to manage the entire HTML document.

The native **htmlNode** type is used to manage a node of the HTML tree: a table, an Input field, a Meta tag...

The **htmlNode** type offers many properties to manage each tag:

- tag name
- attribute
- child element
- sibling element
- parent element
- index
- ...

Example of access to a node of the HTML tree:

```
Document is htmlDocument
[...]
Document.body.color = "blue"
```

Benefit provided by this new feature of version 26:

Your texts are always in style

## 020 New feature WD WB WM SEARCH FOR ELEMENTS IN THE HTML DOCUMENT

2 new WLanguage functions allow you to search for elements in the entire HTML document: **HTMLFindElementById** and **HTMLFindElementByName**.

These functions return an **htmlNode** variable, which can be used to perform all the desired processes.

Benefit provided by this new feature of version 26:

Useful functions

## 021 New feature WD WB WM CODE EXAMPLES

HTML programming in WLanguage is very powerful in version 26.

Here are some examples of code used to read HTML:

- Get a company's turnover on a website

```
// Get the company's turnover
// from the HTML file used to display data in table

HTMLDoc is htmlDocument
HTMLDoc = HTMLOpen("https://site.com/page.html", fromURL)

FOR Year = 2010 TO 2020
  element is htmlNode = HTMLDoc.FindByID("TO_" + Year)
  ArrayAddLine(TABLE_TO, Year, element.value)
END
```

- Analyze an HTML page to retrieve an invoice

```
// Get the invoice URL from the HTML file
// to download the invoice

HTMLDoc is htmlDocument = HTMLOpen("MyFile.html", fromFile)
element is htmlNode = HTMLDoc.FindByID("Invoice_092020")
InvoiceURL is string = element.attributes["href"]
HTTPRequest(InvoiceURL)
```

- Browse through an HTML table

```
// Browse through table rows with ID czZ4 in the HTML document
HTMLDoc is htmlDocument = HTMLOpen("MyFile.html", fromFile)
table is htmlNode = HTMLDoc.FindByID("czZ4")
FOR EACH Row DE table.tbody
  //Process
END
```

- Get the favicon of an HTML page

```
// Get the URL of the page logo
IMG_logo = HTMLDoc.head.querySelector('link[rel*=icon]').href
```

Here is an example of an HTML code generation program, which, based on a template, builds an HTML page to write reviews on a selection of products from a database:

```
// Create survey
// For new products, ask the opinion of the customers
// "Base of survey" html document
HTMLDoc is htmlDocument = HTMLOpen(SurveyTemplate, fromString)

// Set position on <table>
TheTable is htmlNode <- HTMLDoc.FindByID("TheTable")

// Get "template" row (which will be deleted)
TemplateRow is htmlNode = TheTable.TR
DeleteAll(TheTable)

// For each new product
FOR EACH Product WHERE New = True
  // Create a survey row
  // with a caption: "PRODUCTNAME is a new product."
  // and an edit control already present in the template row
  ARow is htmlNode = TemplateRow
  ARow.TD.label.Text = "Your opinion about" + Product.ProdDesc
  // Add row to the HTML document
  Add(TheTable, ARow)
END

// Save page
HTMLSave(HTMLDoc, "survey.html", HTMLDefaultDocument)
```

Benefit provided by this new feature of version 26:

Easily-customizable code







# THE MAP CONTROL REVOLUTION

# THE MAP CONTROL REVOLUTION

## 022 New WD WB WM MAP: INTEGRATE IMAGES IN A MAP



In version 26, you can place images and drawings on a map, to achieve a ground overlay effect: a good example would be overlaying the area of a company building, using the company logo. The image is embedded in the map, which means that when the map is zoomed in, the image also zooms in. The image size

must be specified in meters.

**Benefit provided by this new feature of version 26:**  
Images are now part of the map

## 023 New feature WD WB WM MAP: INTEGRATE GEOMETRIC SHAPES IN A MAP

In version 26, you can also draw and integrate geometric shapes in a map:

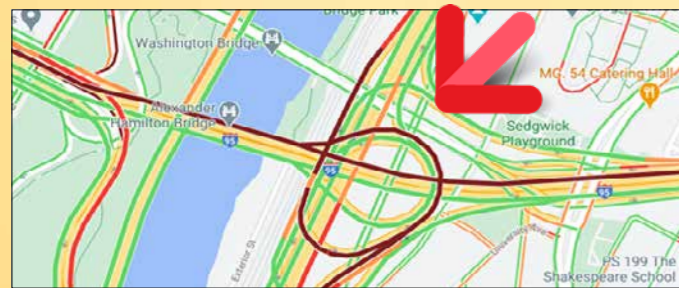
- line
- square
- round
- polygon
- polyline (broken line)
- ...

The shape is embedded in the map, which means that when the map is resized, the shape is resized as well.

**Benefit provided by this new feature of version 26:**  
Draw on Map controls

## 024 New feature WD WB WM MAP: DISPLAY ROAD TRAFFIC ON A MAP

Real-time road traffic can be displayed on a map. On a Google map, the data comes from Google Maps.



Real-time road traffic. Here, traffic jams are shown in red!

**Benefit provided by this new feature of version 26:**  
Avoid traffic jams!

## 025 New feature WD WB WM MAP: DISPLAY A GEOGRAPHIC AREA

By default, a map can display a given geographic area in full screen mode.

You can force the map to display only this area: the user will be able to zoom in, but will not be able to zoom out. The area to be displayed can be specified using either its geographical coordinates or its name (city, region, country, etc.). **MapDisplayArea** positions the Map control on a given geographic area (coordinates of the corners).

**MapLimitArea** limits zoom and drag so that the specified area is always visible.

**GeoGetArea** takes a street, city or country and retrieves the coordinates of the corresponding area.

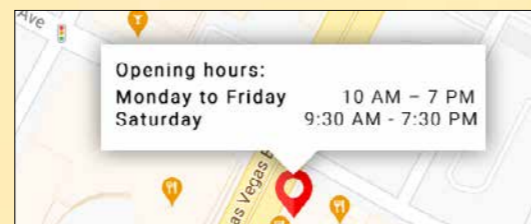
**Benefit provided by this new feature of version 26:**  
The map stays in the desired area

## 026 New feature WD WB WM MAP: DISPLAY A POPUP

Markers have many additional options in version 26, including the possibility to display a popup either by programming or when the marker is clicked on.

This Popup can be fully customized using an Internal Window or an Internal Page.

3 new WLanguage functions are introduced: **MapDisplayPopup**, **MapClosePopup** and **MapPopupDisplayed**.



Custom popup with opening hours

**Benefit provided by this new feature of version 26:**  
Useful, powerful popups in your maps

## 027 New feature WD WB WM MAP: PREVENT GESTURES ON MOBILE DEVICES

On mobile devices, there are 4 possible gestures on maps:

- Pinch zoom
- Scroll
- Rotate
- Tilt

In version 26, you can prevent some of these gestures on a map.

## 030 New feature WD WB WM MAP: MARKER CLUSTER, AUTOMATIC GROUPING

In version 26, Map controls feature "automatic clusters".

Marker clusters improve the readability of a map when there are many markers in a small area. The cluster automatically groups the markers, preventing them from becoming cluttered and unreadable. By default, a cluster is represented by a circle.

The color of this circle varies according to the number of markers it contains.

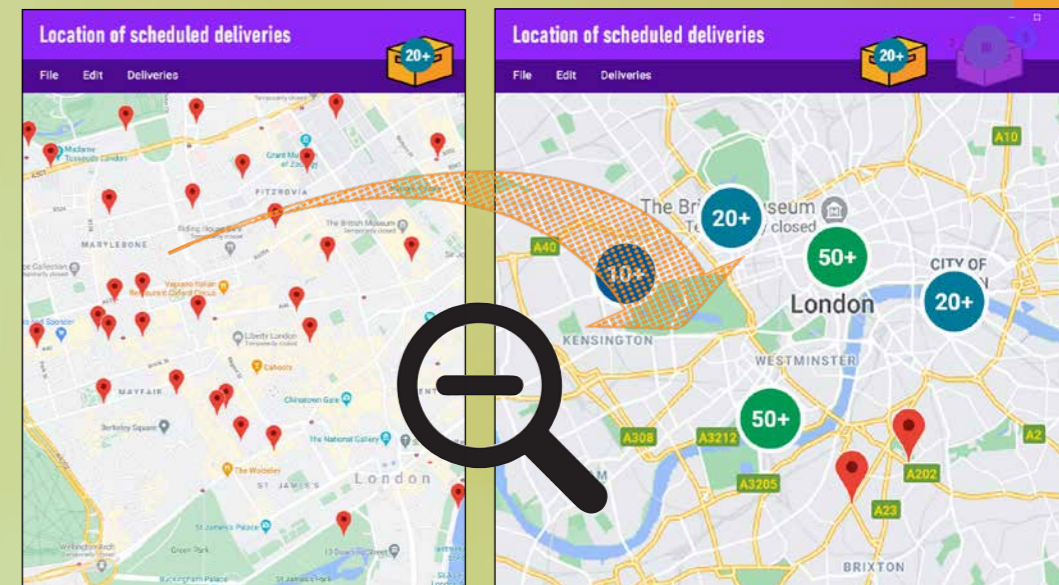
The number of markers is automatically shown in the circle.

Everything can be customized.

For a marker to be grouped in a cluster, simply use the **..Cluster** property.

A new WLanguage type allows you to customize the characteristics of clusters: the **MarkerImage** type.

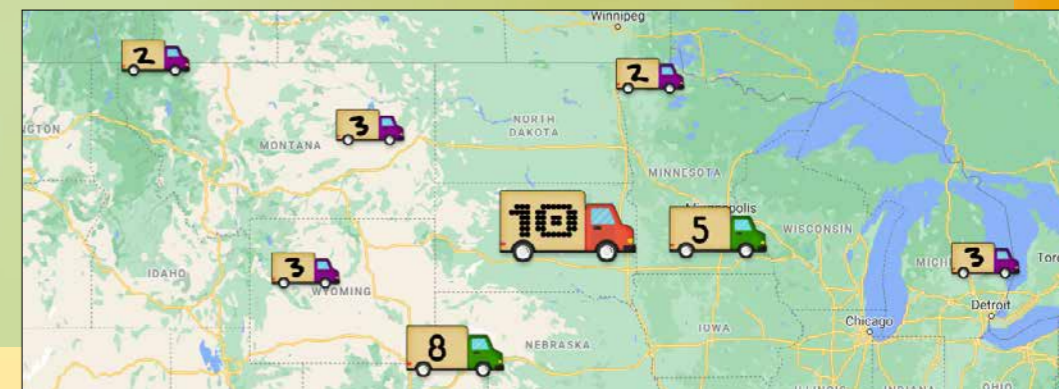
**Benefit provided by this new feature of version 26:**  
Automatic grouping



A map with markers.

Map zoomed out: the markers are automatically grouped in clusters

Another map with custom clusters: shape, content,...



**Benefit provided by this new feature of version 26:**  
Define how your maps can be used

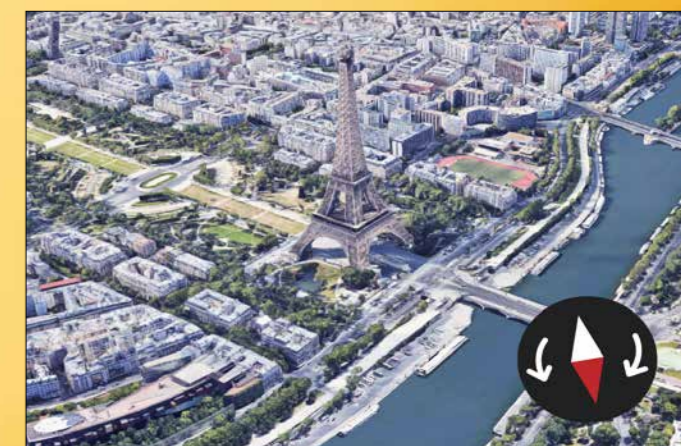
## 028 New feature WD WB WM MAP: STYLE: DARK THEME...

In version 26, a map can be displayed using a dark theme. Other map themes (grey, etc.) are also available.

**Benefit provided by this new feature of version 26:**  
The dark side of the map...

## 029 New feature WD WB WM MAP: 3D VIEW, ANGLE...

You can change the viewing angle of the map (0° to 45°) by programming, using a single property. **..Tilt**. You can also rotate the map.



Here, the map has been tilted by 30°. North is offset 177°

**Benefit provided by this new feature of version 26:**  
View maps from all angles



## 031 New feature WD WB WM MAP: MISCELLANEOUS

In version 26, the Map control benefits from other new features:

- Ability to display a compass
- New properties for markers: `..Opacity`, `.. Movable`, `.. ActionDrag`, `..ZOrder`, `..Note` ...
- The `MarkerImage` type allows you to customize the image of a marker

**Benefit provided by this new feature of version 26:**  
*Additional customization*

## 10 NEW SMART CONTROLS

Version 26 features 10 new Smart controls:

- Help for password creation
- "Bank-type" PIN code input
- 3-dot context menu button
- Google reCaptcha
- Video control with playback buttons
- Phone unlock pattern
- Combo box with check box
- Token in filter mode
- Date and time input with the mouse
- Snackbar

Find these Smart controls directly in the corresponding sections: new features 176 to 182 for WINDEV, 655 to 658 for WINDEV Mobile, and 718 to 725 for WEBDEV.

## NEW FEATURES OF PDF CONTROLS



### 032 New feature WD WB WM PDF READER CONTROL: EXTRACT PAGES

The PDF Reader control allows you to create a new PDF document that contains a set of pages (range or different pages) of a specified PDF document.

**Benefit provided by this new feature of version 26:**  
*No programming required*

### 033 New feature WD WB WM PDF READER CONTROL: ADD PAGES

The PDF Reader control allows you to insert one or more pages at a specified location in an existing PDF document.

**Benefit provided by this new feature of version 26:**  
*No programming required*

### 034 New feature WD WB WM PDF READER CONTROL: DELETE PAGES

The PDF Reader control allows you to delete one or more pages from an existing PDF document.

**Benefit provided by this new feature of version 26:**  
*No programming required*

### 035 New feature WD WB WM PDF READER CONTROL: HOVERED AREA

How to determine what the end user is hovering over in a PDF document? `MouseXPos` and `MouseYPos` are the standard functions used to get the mouse position.

The `PDFReaderInfoXY` WLanguage function returns the page number and the mouse coordinates within the page (in millimeters).

For example, this allows you to display context information about the PDF document.

**Benefit provided by this new feature of version 26:**  
*Interactive documents*

## NEW FEATURES OF WORD PROCESSING AND SPREADSHEET CONTROLS

### 036 New feature WD WB WM WP CONTROL: CONTINUOUS DISPLAY

The Word Processing control now offers continuous text display, without page breaks. This allows for smoother reading.

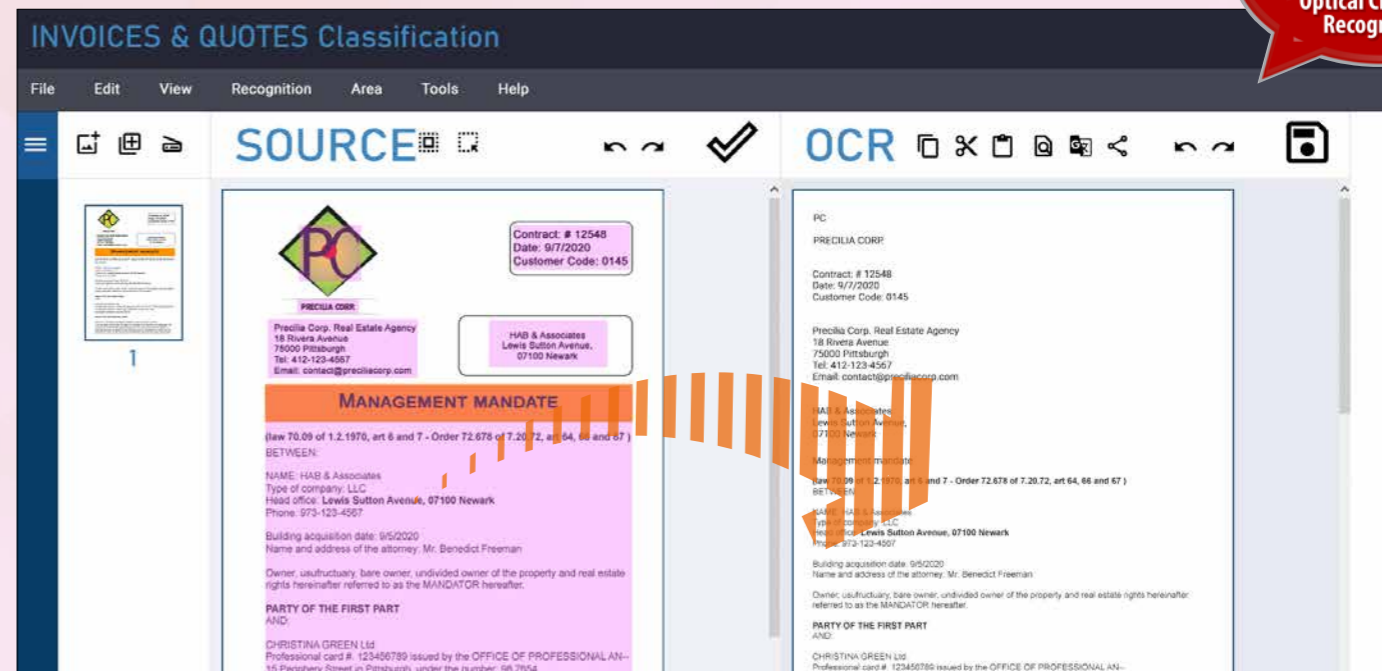
**Benefit provided by this new feature of version 26:**  
*View without breaks*

### 037 New feature WD WB WM WP CONTROL : MISCELLANEOUS

- Spanish dictionary included
- Default file save name: start of text or defined by programming
- New function: `DocInfoXY`

**Benefit provided by this new feature of version 26:**  
*Practicality*

## NATIVE OCR: TRANSFORM A PHOTO, AN IMAGE OR A SCAN INTO TEXT



Reminder: an OCR (Optical Character Recognition) system analyzes an image to extract the text it contains.

Version 26 allows you to include native OCR functionalities in your applications and sites.

The OCR engine is a neural network. It decrypts images containing text.

Take a picture of a contract with your phone, and retrieve the text in your app or in Microsoft Word!

OCR is also very useful for a DMS, in order to index the contents.

**Benefit provided by this new feature of version 26:**

*Extract text from images and scanned documents*

*OCR is useful for any purpose:*

- EDM
- Expense accounts
- Invoices
- Quotes
- Contracts
- Search in a scan

### 038 New feature WD WB WM A NEW WLANGUAGE FAMILY: OCR

The method for retrieving a text is simple: simply pass an image (any format) or a PDF document to the `OCRExtractText` function.

`OCRExtractText` will return all the text from the image.

All content other than text is ignored.

To analyze only a part of an image, simply specify the coordinates of the part to be analyzed.

For example:

```
MyRectangle is Rectangle
MyRectangle..X=129
MyRectangle..Y=94
MyRectangle..Width=1353
MyRectangle..Height=121
OCRExtractText(MyImage, MyRectangle)
```

`OCRExtractText` analyzes an image and returns a set of rectangles each containing a block of text.

### 039 New feature WD WB WM OCR: MANAGEMENT OF LANGUAGES

By default, all languages are supported.

The OCR system recognizes the following charsets:

- Latin
- Cyrillic
- Chinese
- Japanese
- Arabic
- Hebrew
- ...

Additionally, the OCR system analyzes the resulting texts in real time and uses a language-specific model.

This model improves recognition.

The default optimized languages are English, French and Spanish.

To optimize other languages, simply integrate the training model of the corresponding neural network (available on the Internet).

Multiple languages can be supported simultaneously. This optimization can be disabled.

**Benefit provided by this new feature of version 26:**  
*Advanced recognition*

Continues page 14...



## 040 New feature WD WB WM SPREADSHEET CONTROL: DOCUMENT WITH MULTIPLE WORKSHEETS

In an XLSX file with multiple worksheets, the last worksheet used is remembered, and will be displayed next time the file is opened. The end user can also rearrange worksheets.

|    |            |               |             |
|----|------------|---------------|-------------|
| 8  | Marseill   | Slim dress    | 25-ZU64-27D |
| 9  |            | Phoenix dress | 11-AD57-75E |
| 10 |            |               |             |
| 11 | ris agency | Lucky dress   | 84-JE18-27V |
| 12 |            | Joy           | 17-BW36-72C |

Worksheet tabs at the bottom of the spreadsheet

**Benefit provided by this new feature of version 26:**  
Users find their documents as they left them

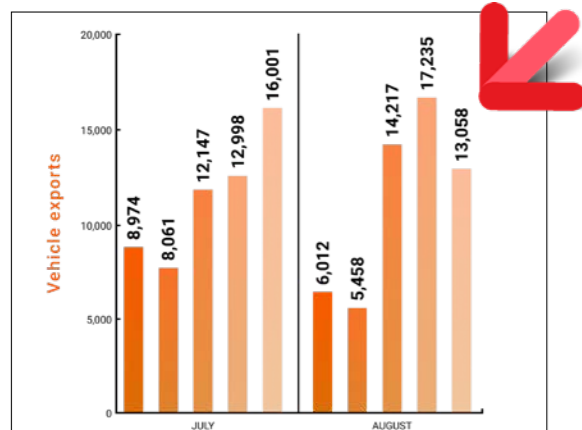
## 041 New feature WD WB WM SPREADSHEET CONTROL: MISCELLANEOUS

It is now possible to merge cells by programming.  
**Benefit provided by this new feature of version 26:**  
Fine processing

## NEW FEATURES OF CHART CONTROLS

### 042 New feature WD WB WM NEW FEATURE IN CHART CONTROLS: VERTICAL LABELS

A new option allows you to change the orientation of bar values.

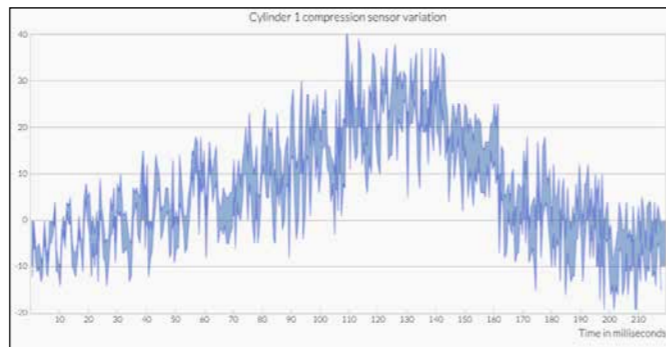


Vertical labels

**Benefit provided by this new feature of version 26:**  
A new type of layout

### 043 New feature WD WB WM NEW CHART: RANGE AREA

A new type of chart is introduced in version 26: the Range Area chart. This type of graph is used to visualize a variation between a high and a low value. The X-axis generally represents time, and the chart shows the evolution of the high and low values.

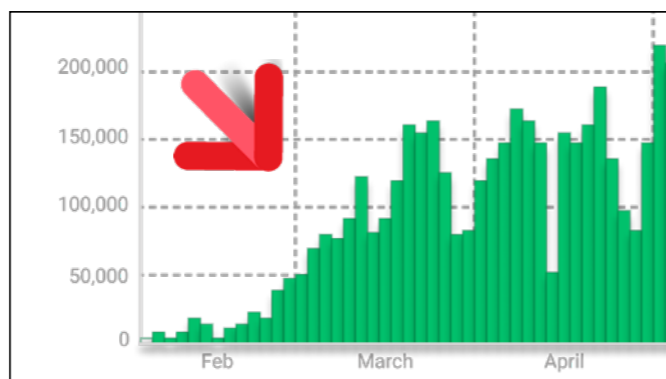


A Range Area chart

**Benefit provided by this new feature of version 26:**  
A very useful chart!

### 044 New feature WD WB WM NEW FEATURE IN CHART CONTROLS: DOTTED GRIDLINES

You can now use dotted gridlines in Chart controls: these are a lighter version of standard gridlines!



Dotted gridlines in the background

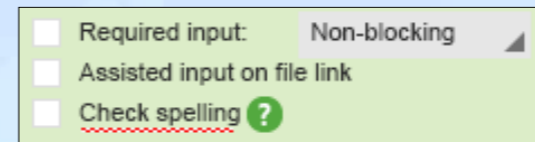
**Benefit provided by this new feature of version 26:**  
Light gridlines for better readability

## CONTROL: NON-BLOCKING REQUIRED INPUT

The required input mode has been completely revolutionized in version 26: the cursor is no longer blocked in every required field! Of course, the old mode is still available.

### 045 New feature WD WB WM EXIT A REQUIRED INPUT FIELD WITHOUT FILLING IT IN

WINDEV, WEBDEV and WINDEV Mobile have always included required input fields. If the required input field was empty, the user was unable to move to the next field. In version 26, it is possible to exit a required input field and fill it in later: the required fields will only be verified when the window or page is validated. A new option has been introduced in the controls 7-tab window: "Required input: Non blocking".



**Benefit provided by this new feature of version 26:**  
Freedom for the end user

### 046 New feature WD WB WM NON-BLOCKING REQUIRED INPUT FIELD: HOW DOES IT WORK

A new WLanguage function has been introduced: `InvalidInputDetect`. Simply call the `InvalidInputDetect` function in the window validation code. This function returns `True` or `False`. When the function returns `False`, it means that there is at least one required field left empty. The window goes back into input mode and the cursor is positioned on the first empty required field. Required fields that are left empty are highlighted with a specific style (see new feature 047).

**Benefit provided by this new feature of version 26:**  
Easy programming

### 047 New feature WD WB WM HIGHLIGHT REQUIRED INPUT FIELDS AUTOMATICALLY

More specific options have been introduced to highlight required input fields. The style of a control determines how the required input will be indicated: asterisk, red border, icon...

Email \*

Password

2 examples of styles for required fields: asterisk, red border

An additional indication can be used to identify fields that have been left empty, after trying to validate the window or page.

User name

The "exclamation mark" icon next to the field indicates that the required field was left empty

**Benefit provided by this new feature of version 26:**  
Custom styles

### 048 New feature WD WB WM REQUIRED INPUT FIELD: NEW, COMBO BOX, RADIO BUTTON, CHECK BOX

In version 26, in addition to Edit controls, you can set the following controls as "required fields":

- combo box, editable combo box
- radio button
- check box.

The styles of these controls include all the necessary graphic elements.

**Benefit provided by this new feature of version 26:**  
More intuitive UI

### 049 New feature WD WB WM INVALID INPUT MASK

The verification of edit controls with an input mask also evolves. The control style now includes the necessary elements to highlight an invalid input: icon, text, borders... The input can be verified immediately, or upon window validation.

Invalid user name

User name  Invalid user name

2 style examples for an invalid input

Continues page 16...



## EDIT YOUR WEBDEV SITES AND YOUR MOBILE APPS IN WINDEV

### 050 WD WB WM NO NEED TO DUPLICATE YOUR PROJECTS: ONE SINGLE ENVIRONMENT

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 and 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.  
*Reminder: you need a license of the corresponding software products.*

**Benefit provided by this new feature of version 26:**  
*One for all, all for WINDEV*

### 051 New feature WD WB WM SYNTAX HIGHLIGHTING OUTSIDE A CONFIGURATION

In version 26, all open code offers syntax highlighting, even code that is not included in a configuration.  
**Benefit provided by this new feature of version 26:**  
*Life in color*

### 052 New feature WD WB WM 32-BIT AND 64-BIT OPERATION

The integration of WINDEV Mobile and WEBDEV in WINDEV has always worked in 64-bit mode. In version 26, the products can also be integrated in 32-bit mode. This makes it possible to use external resources (ActiveX, DLL, Native Connector, etc.) that work only in 32-bit.  
**Benefit provided by this new feature of version 26:**  
*Compatibility with external resources*

## TRANSFORM YOUR WINDEV APPLICATIONS INTO WEBSITES OR SAAS



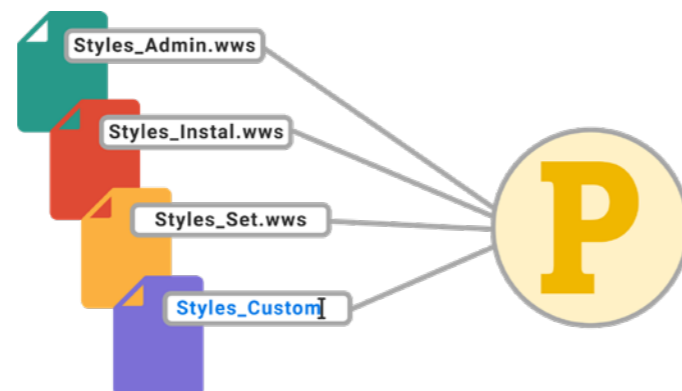
### 053 New feature WD WB WM YOUR EXISTING WINDEV PROJECTS CAN BECOME WEBSITES OR SAAS APPLICATIONS

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. In version 26, the SaaS manager has been modernized. See new feature 779.  
**Benefit provided by this new feature of version 26:**  
*A better SaaS manager*

## STYLE SHEETS

### 054 New feature WD WB WM STYLE SHEET NAMING

In version 26, you can freely create and name your style sheets.



**Benefit provided by this new feature of version 26:**  
*Each style has a name!*

### 055 New feature WD WB WM MULTIPLE STYLE SHEETS PER PROJECT

In version 26, a project can use multiple style sheets simultaneously. When selecting the style, it is possible to filter the style sheet(s) to be displayed by default.  
**Benefit provided by this new feature of version 26:**  
*Style!*

### 056 New feature WD WB WM EASILY SHARE STYLE SHEETS

Thanks to these new features, it becomes much easier to manage and reuse your styles without constraints. A style sheet can be simply copied to the project directory like any other element. Style sheets can also be managed and shared via the SCM. Everyone will love these simplified operations!  
**Benefit provided by this new feature of version 26:**  
*Share your style*

## DATA MODEL EDITOR DATA SCHEMA

### 057 New feature WD WB WM GENERATE CLASSES FROM THE ANALYSIS (OBJECT-RELATIONAL MAPPING)

It is now possible to generate a data file (table) class directly from the data model editor. No need to go back to the project explorer.  
**Benefit provided by this new feature of version 26:**  
*Less clicks*

### 058 New feature WD WB WM GENERATE STRUCTURES

It was already possible to generate a class from a data file (table) description. In version 26, it is now possible to generate a structure instead of a class.  
**Benefit provided by this new feature of version 26:**  
*Generate without limitations*

# COMPATIBLE WITH PREVIOUS VERSIONS



### WINDEV 26 respects your existing assets.

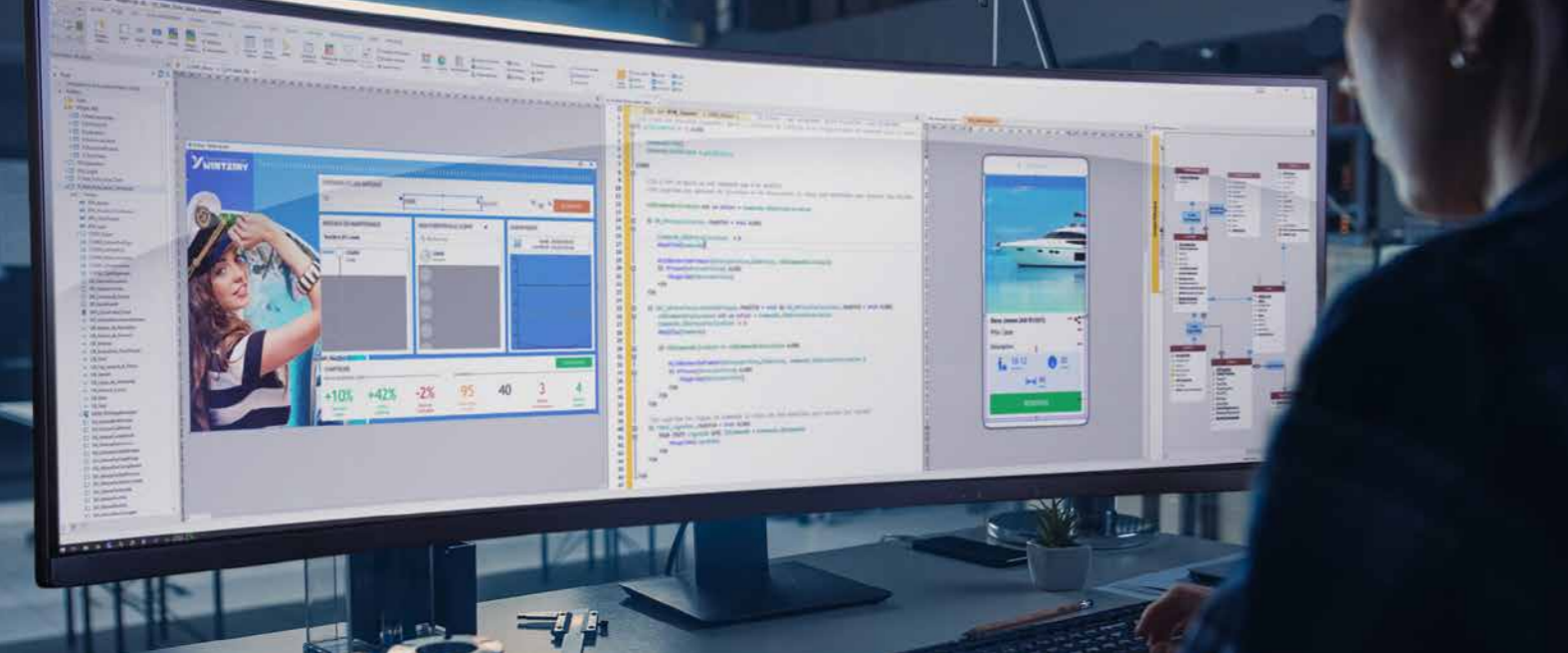
No migration phase required between WINDEV versions 7.5 - 25 and WINDEV 26: Simply recompile the application and it will work in version 26. Switching from an earlier version of WEBDEV to WEBDEV 26 is also easy. Same for WINDEV Mobile.

The existing components (version 8 to 25) work directly without needing to be recompiled with applications in version 26.

Version 26 directly opens a project in version 7.5 to 25.

Several different versions of your environments can coexist simultaneously on your PC; a license 26 also launches the previous versions 5.5 to 25.





The new split view mode is a major advantage when working with ultra-wide screens!  
For example, having multiple code windows side by side greatly improves workflow.

# ENVIRONMENT: SPLIT YOUR WORKSPACE GREAT IDEA!

## 065 New feature WD WB WM MORE EFFICIENT ENVIRONMENT: MULTIPLE WINDOWS

2 code windows open side by side?  
1 window and its code side by side? Select a control, press F2 and the code changes in the window next to it.  
A WINDEV window and the equivalent WEBDEV page?  
In version 26, these modes are automatic.  
You no longer need to manually move and resize windows: That changes everything!  
Each window has its own document bar.  
You can open more than 2 windows simultaneously, and use a splitter to resize each window.  
The workspace is now automatically reorganized.  
The workspace can be divided into several horizontal or vertical windows.  
In each window, you can open as many documents as you want, from any editor. You can drag & drop a document from one window to another.

The same document can be opened multiple times in different windows, to view simultaneously:

- the different layers of a window or page
- the different resolution slices of responsive pages
- the different layouts: portrait, landscape, iOS, Android , tablet, smartphone, etc.
- a WINDEV window and the equivalent WEBDEV page.

**Benefit provided by this new feature of version 26:**  
Propagate changes much more efficiently

## 066 New feature WD WB WM NAVIGATE THROUGH THE DOCUMENT BAR WITH THE MOUSE WHEEL

In version 26, you can navigate through the document bar using the mouse wheel: it's a very practical feature.

**Benefit provided by this new feature of version 26:**  
No need to reinvent the wheel!

## ENVIRONMENT

### 059 New feature WD WB WM WHOOSH! 3X FASTER COMPILATION TIME

Buckle up... In most cases, your projects will compile 3 times faster!  
This makes work significantly easier.

**Benefit provided by this new feature of version 26:**  
3x faster compilation

### 060 New feature WD WB WM OPEN 7-TAB WINDOWS EVEN FASTER

We all spend a lot of time in the 7-tab windows! These windows will now open faster to improve development workflow!

**Benefit provided by this new feature of version 26:**  
Faster, better!

### 061 New feature WD WB WM NAVIGATION BETWEEN ELEMENTS: FASTER CTRL+TAB!

The CTRL+TAB key combination allows you to quickly switch between open elements.  
In version 26, the latency of this operation is gone: 53 minutes saved per year!

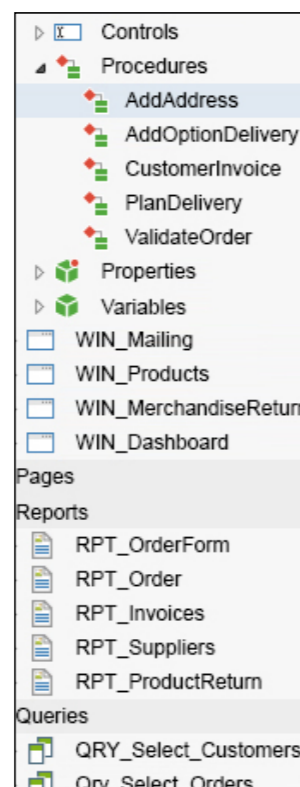
**Benefit provided by this new feature of version 26:**  
Faster, better!

### 062 New feature WD WB WM LESS OPERATIONS: DETACH TABS FROM THE RIBBON

In version 26, you can detach a tab from the ribbon to make it permanently accessible.  
This avoids switching between tabs.  
For example, when working on UI, the alignment tab can be left permanently open. You can detach multiple tabs.

**Benefit provided by this new feature of version 26:**  
Tabs accessible at all times

### 063 New feature WD WB WM UPDATED PROJECT EXPLORER



In version 26, the project explorer has been made lighter and more user-friendly. Elements of different types are clearly separated.  
**Benefit provided by this new feature :**  
Your elements at a glance

### 064 New feature WD WB WM RIGHT/LEFT? PROJECT EXPLORER ON THE LEFT

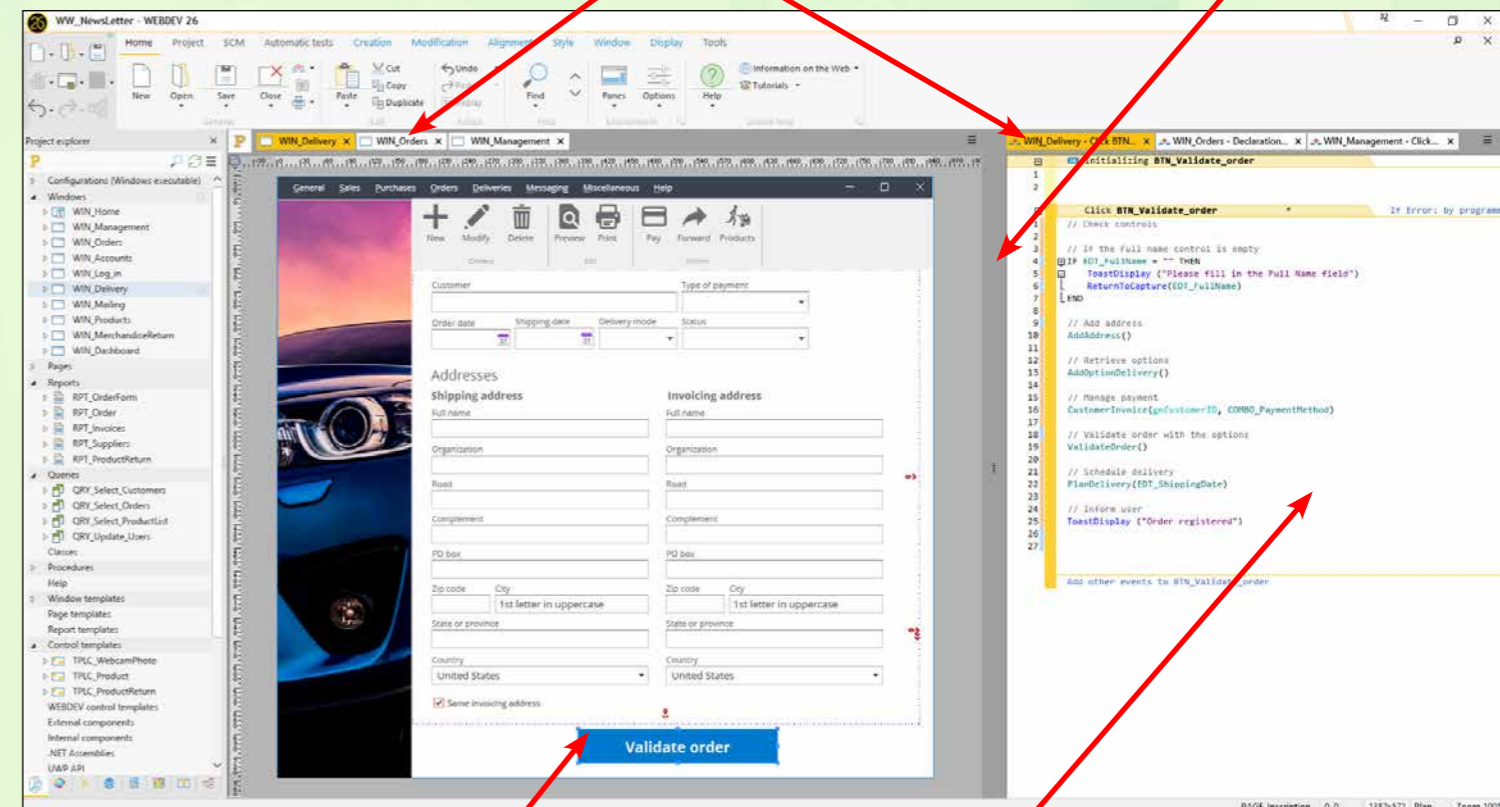
It seems the mouse cursor is most often positioned on the left side of the screen.  
To reduce mouse movements, the explorer is now positioned on the left by default.  
And if you prefer, you can send it back to the right in 1 single operation!

**Benefit provided by this new feature :**  
Reduce mouse movements

Continues page 20...

Document bar in each window

Splitter, to resize the windows



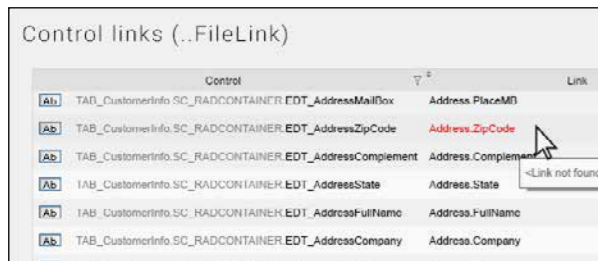
Window: selected control

Code of selected element displayed on request (F2)



## 067 New feature WD WB WM LINK EDITOR (WINDOW, PAGE, REPORT)

A link editor is introduced in version 26. This editor lists all the controls in the window, page or report, and indicates whether each control has a link, as well as which source it is linked to. The editor also allows you to modify the link of a control or a group of controls: replace a data file with a request, for example. You can launch a search for all the uses of a control in the code of the window/page/report.



Link editor: error highlighted on row 2!

**Benefit provided by this new feature of version 26:**  
Easier management of links

## 068 New feature WD WB WM SEARCH ON SELECTED CONTROLS

As you know, WINDEV offers a powerful search feature in its environment. You can search for elements in the code, in 7-tab windows, in multilingual messages... In version 26, it is possible to narrow the search down to a set of controls selected with the mouse.

**Benefit provided by this new feature of version 26:**  
Specific search

## 069 New feature WD WB WM COPYING/PASTING A CONTROL LINKED BY PROGRAMMING RENAMES THE REFERENCES TO THIS CONTROL IN THE CODE

Let's take the example of an Edit control followed by a "Browse" button. The code of the "Browse" button opens a file selector and assigns the file selected by the user to the Edit control. The name of the Edit control is therefore in the code of the "Browse" button. When the Edit control and its button are copied and pasted in the same window, the new controls will automatically be renamed. Without this method, the code of these controls would be wrong, as it would use the old control names. In version 26, the names of controls used in programming that are copied and pasted, are automatically renamed.

**Benefit provided by this new feature of version 26:**  
Smarter copy

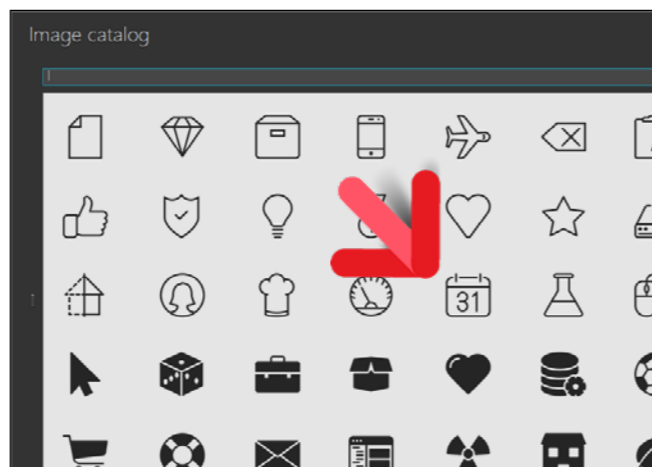
## 070 New feature WD WB WM REOPEN AN ELEMENT CLOSED BY ACCIDENT: CTRL+SHIFT+T

During the development phase, open elements are often closed by accident: a window, a procedure, a class... Finding it to open it again can be really annoying. In version 26, you can simply press **CTRL+Shift+T** to reopen the last closed element (just like on a browser). If you press **Ctrl+Shift+T** twice, you will open the last 2 closed elements, etc. (Up to 10 elements).

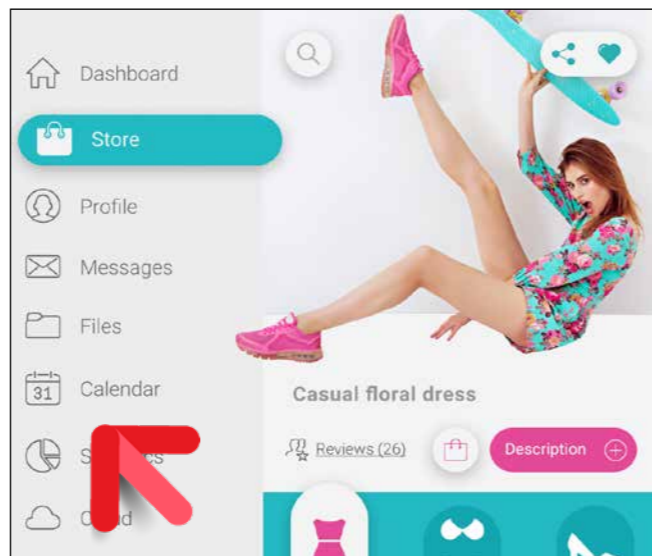
**Benefit provided by this new feature of version 26:**  
Get your elements back with a simple shortcut!

## 071 New feature WD WB WM CLIPART: 10,000 NEW ICONS

The provided clipart is enhanced with 10,000 new icons in modern, outline and black & white styles. Take a look to enrich the UI of your applications and sites!



Modern, fashionable icons

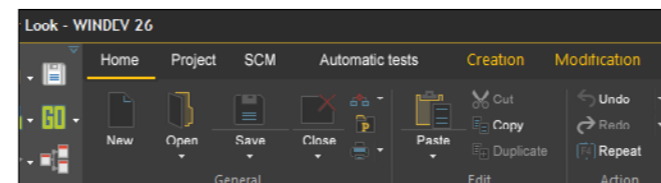


New icons used in a window

**Benefit provided by this new feature of version 26:**  
Keep up with trends...

## 072 New feature WD WB WM RIBBON ICONS: NEW LOOK

The ribbon now uses vector icons, which are even sharper.



**Benefit provided by this new feature of version 26:**  
Clean, unmistakable icons

## 073 New feature WD WB WM MISCELLANEOUS

- All the processes of the project, even those from other configurations, are visible.
- A new option allows you to list Custom-Folders of a project, if it contains more than 20.
- It is now possible to include or exclude an element from a set of configurations in a single operation.
- The content of the portfolios changes according to the environment that uses them.

**Benefit provided by this new feature of version 26:**  
Practicality

## PROJECT MONITORING CENTER

## 074 New feature WD WB WM CATEGORIZE BUG TICKETS

You can now tag bug tickets to easily classify and sort them. Use as many tags as you want. The same ticket can have several tags.

Examples of tags:

- to develop
- urgent
- suggestion
- accounting module
- ...

**Benefit provided by this new feature of version 26:**  
Higher precision

## 075 New feature WD WB WM CREATION OF REQUIREMENTS: IMPROVED UI

You can now create requirements with 3 times less clicks. UI has been simplified.

**Benefit provided by this new feature of version 26:**  
Less actions required

## 076 New feature WD WB WM TASK LIST: HIGHLIGHT TASKS IN WHICH YOU ARE THE REQUIREMENT MANAGER

Each developer views their task list. The developer filters this list according to different criteria: sprint, folder,... When the developer is also the manager of a requirement, the tasks that belong to that requirement are highlighted. This allows developers to better prioritize their tasks.

**Benefit provided by this new feature of version 26:**  
Better organization

## STATIC AUDIT OF YOUR CODE

## 077 New feature WD WB WM WARNING WHEN USING OLD SYNTAXES FOR THREADS

Old syntaxes for managing threads are still supported. In some cases, these old syntaxes do not allow closing windows and pages. The audit identifies these old syntaxes and proposes to replace them with the modern syntax, which is richer and more secure.

**Benefit provided by this new feature of version 26:**  
Secure your code

I want version  
26 now!



## 078 New feature WD WB WM CONTROL PREFIXES: UI COMPILATION ERROR

Controls that do not use a prefix defined in the code style appear in the UI errors.  
This feature is not enabled by default.

**Benefit provided by this new feature of version 26:**  
*Precision*

## 079 New feature WD WB WM DETECTION OF MISSING DEPENDENCIES

The audit now reports missing dependencies. These are some of the types of dependencies that can be detected: style sheets, external libraries, documentation files, external CSS sheets, external JS codes, favorites file, internal and external component files, code style, custom fonts in the project, etc...

**Benefit provided by this new feature of version 26:**  
*Monitor your dependencies*

## DYNAMIC AUDIT OF YOUR CODE

## 080 New feature WD WB WM HASHSTRING CHANGES ACCORDING TO THE PLATFORM (MOBILE, LINUX)

Android and iOS handle UNICODE strings differently. Android stores 4-byte characters (like Linux), while iOS stores 2-byte characters (like Windows). The WLanguage `HashString` function (which manipulates bytes) will give different results depending on the platform. The dynamic audit reports this.

**Benefit provided by this new feature of version 26:**  
*2 -byte or 4-byte, that is the question*

## TECHNICAL AND FUNCTIONAL DOCUMENTATION

## 081 New feature WD WB WM CLEANER LAYOUT

The program documentation of your application now proposes to exclude the captions of properties without content. Only the properties that have actually been used appear in the

documentation.  
This allows for clearer pages.  
**Benefit provided by this new feature of version 26:**  
*Clarity*

## CONTINUOUS INTEGRATION SOFTWARE FACTORY

## 082 New feature WD WB WM NEW ACTION: SITE (AND WEBSERVICE) DEPLOYMENT

Action plans can now include the deployment of a site or a Webservice (see new feature 931). A highly anticipated and practical new feature related to management task automation.

**Benefit provided by this new feature of version 26:**  
*DevOps*

## 083 New feature WD WB WM TEMPORARILY DISABLE AN ACTION

You can now disable an action to stop executing it, without losing its configuration.

**Benefit provided by this new feature of version 26:**  
*Keep the action*

## 084 New feature WD WB WM NEW ACTION: DISABLE PROGRAMMING STANDARD ERRORS

The Software Factory now differentiates programming standard errors (zombies, etc.) from other compilation errors. It is now possible to specifically disable these errors in order to run action plans.

**Benefit provided by this new feature of version 26:**  
*Run action plans without constraints*

## 085 New feature WD WB WM ADMINISTRATOR: BETTER AND FASTER UI

The Software Factory administrator becomes significantly faster: it is much easier to use.

**Benefit provided by this new feature of version 26:**  
*Speed*

## PASSWORD SECURITY : USER GROUPWARE

## 086 New feature WD WB WM LOGIN WITH TWO-FACTOR AUTHENTICATION: AUTOMATIC

In version 26, WINDEV, WEBDEV and WINDEV Mobile allow



you to set up a login via two-factor authentication. The User Groupware (GPU, included as standard) now supports two-factor authentication through a standard application (Google Authenticator, Microsoft Authenticator or other). This application, to be downloaded on a mobile phone, returns a personal code on demand (valid for 30 seconds) that must be entered at login (TOTP protocol).

The GPU administrator can make two-factor authentication mandatory. The GPU administrator can also temporarily disable two-factor authentication for a user (if the user loses their phone, for example). The "Trust this device" option is available. After using two-factor authentication for the first time, this option allows the user to switch back to single authentication mode to facilitate connections from that specific device. The "Trust this device" option is automatically managed.

**Benefit provided by this new feature of version 26:**  
*Security*

## 087 New feature WD WB WM UNIFIED USER MANAGEMENT (MBAAS)

WINDEV's User Groupware (GPU) has always allowed direct access to the User Groupware database. This mode will work as usual. In version 26, your WINDEV applications, WEBDEV sites and WINDEV Mobile applications can access the User Groupware through MBAAS (Webservice). In MBaaS, data is accessed through a Webservice. This access

does not require opening any particular port. The User Groupware can then be managed via a website. If you allow it, end users will even be able to log in to this site to manage their own profiles: change their passwords...

**Benefit provided by this new feature of version 26:**  
*Improved cross-platform*

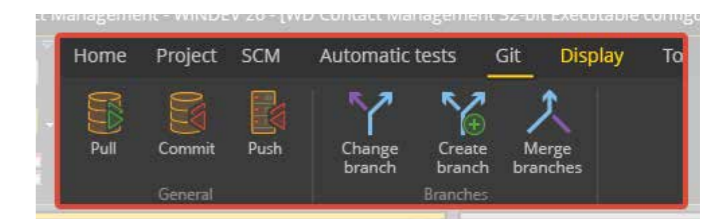
## GIT / GITHUB



## 088 New feature WD WB WM "GIT" TAB IN THE EDITOR RIBBON

To make Git-related actions easier, a tab with the most common Git commands is now available:

- commit
- pull
- push
- merge
- ...



*Git menu in the environment*

**Benefit provided by this new feature of version 26:**  
*Git actions in 1 click*



## 089 New feature WD WB WM PROJECT (WDP) IN TEXT FORMAT

The list of elements of the project is now stored in text format to merge projects more easily in Git.

**Benefit provided by this new feature of version 26:**  
*Useful feature for Git*

## IMAGE EDITOR

## 090 New feature WD WB WM RECTANGULAR SNIP

The image editor now offers a useful rectangular snip feature. You can now take a screenshot on the PC by selecting the rectangular area you want to snip. This area can then be edited directly in the image editor.

**Benefit provided by this new feature of version 26:**  
*Simplified operations*

## WDMMSG AUTOMATIC TRANSLATION



## 091 New feature WD WB WM WDTRAD: LOAD DOCUMENTS FASTER

Documents are loaded much faster in WDTRAD. No more coffee breaks when loading large documents. Sorry!  
**Benefit provided by this new feature of version 26:**  
*Speed!*

## 092 New feature WD WB WM WDTRAD: MULTISELECTION

You can now make certain operations in bulk thanks to the multiple selection. For example, if a term is changed, you can delete a series of obsolete entries in the dictionary in one go. The search is also improved.

**Benefit provided by this new feature of version 26:**  
*Time saved*

## 093 New feature WD WB WM WDINT SPANISH

In version 26, you can select Spanish as the source language to translate the framework.

**Benefit provided by this new feature of version 26:**  
*Good news for Spanish-speaking developers*

## SCM - COLLABORATIVE SOURCE CODE MANAGER

## 094 New feature WD WB WM SCM: TREE VIEW OF INTERNAL COMPONENTS

In version 26, the update window displays internal components in a tree structure.

**Benefit provided by this new feature of version 26:**  
*More concise view*

## 095 New feature WD WB WM SCM: IMPROVED UI OF BRANCH HISTORY

The history of the elements of a branch can be viewed from the branch itself, without having to go back to the trunk.

**Benefit provided by this new feature of version 26:**  
*Fewer operations*

## 096 New feature WD WB WM SCM : LAUNCH ACTION PLANS AUTOMATICALLY DURING REINTEGRATION (CI/CD)

When one or more elements are reintegrated, one or several action plans can be started automatically.

For example:

- Start automatic tests
- update the projects that share these elements
- generate executables
- run setups
- ...

This new feature facilitates Continuous Integration & Continuous Delivery.

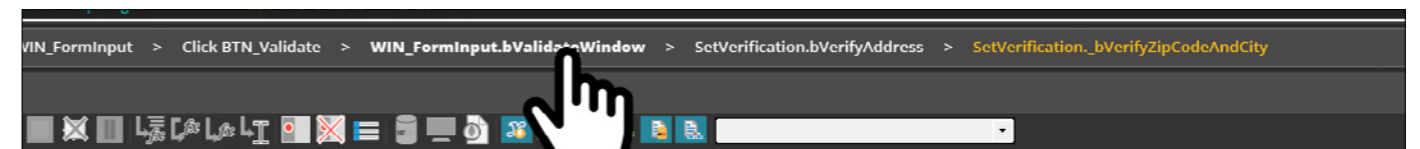
**Benefit provided by this new feature of version 26:**  
*Can't do without it*

## CODE EDITOR

## 097 New feature WD WB WM BREADCRUMBS

Developers often dive deep into their code: using **F2** several times in a row is quite common!

In version 26, Breadcrumbs are introduced in the code editor. These breadcrumbs allow you to view the structure of the code, and to go directly to the desired level.



**Benefit provided by this new feature of version 26:**  
*More practical navigation*

## 098 New feature WD WB WM LIGHT COLORING: 3 COLOURS INSTEAD OF 36 SHADES

The code editor allows you to fine-tune syntax highlighting. For developers who prefer a clearer view of their code, a new, simpler coloring mode has been added. Many color shades are no longer used. Code is easier to read.

**Benefit provided by this new feature of version 26:**  
*Everything is clear*

## 099 New feature WD WB WM MOVE WITH CTRL + ARROW KEYS

Moving with Ctrl + Arrow is now more intuitive:

- Ctrl + Right arrow: beginning of next word
- Ctrl + Left arrow: beginning of previous word
- Ctrl + Shift + Right arrow: extend selection to the end of the next word
- Ctrl + Shift + Left arrow: extend selection to the end of the previous word.

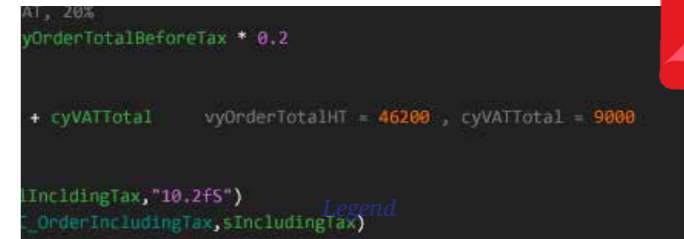
Convenient!

**Benefit provided by this new feature of version 26:**  
*Intuitive shortcuts*

## DEBUGGER

## 100 New feature WD WB WM DEBUGGER: REAL-TIME VARIABLE WATCH

In version 26, the debugger systematically displays the value of the variables at the end of the line. You can avoid hundreds of operations every day!



**Benefit provided by this new feature of version 26:**  
*Easier optimization*

## 101 New feature WD WB WM REMOTE DEBUGGER: SELECT AN EXE OR A SERVICE STARTED MULTIPLE TIMES

When doing remote debugging (with WDDebug, included as standard), the debugger must be associated with the process. When the same EXE or service is started multiple times on the remote machine, the selection list now shows the details of the command line (often unique per process) for each instance, which makes it possible to identify each process.

**Benefit provided by this new feature of version 26:**  
*Easier optimization*

## DEVOPS

## 102 New feature WD WB WM INTEGRATED DEVOPS ENVIRONMENT

WINDEV, WEBDEV and WINDEV Mobile version 26 form an increasingly cohesive DevOps environment.

You benefit from all the necessary functionalities to implement the DevOps approach: no more scattered, barely-compatible tools.

You have all the integrated tools to manage the DevOps methodology: life cycle management, testing, continuous integration, deployment, continuous delivery, production, user feedback,...

Version 26 includes some interesting new features for Docker, robot (Watchdog), ...

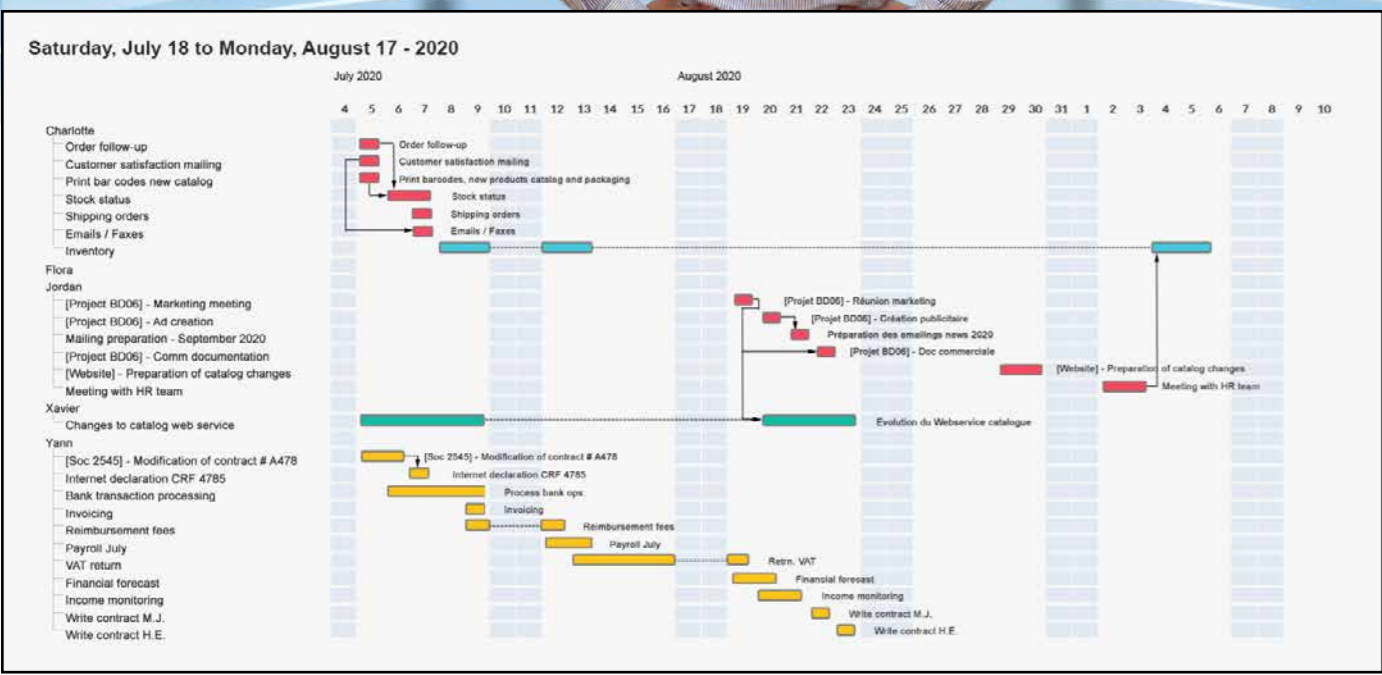
**Benefit provided by this new feature of version 26:**  
*Open to all methodologies*



# REPORT EDITOR

**103** New feature WD WB WM  
**REPORT EDITOR:  
IMPROVED GANTT CHART RE-  
PORTS**

Gantt chart reports have been revised and improved: task labels and recipients are included in the first column of each task, the number of days of each task is displayed,... Better layout and legibility. Your Gantt chart reports will look amazing!  
**Benefit provided by this new feature of version 26:**  
Clearer reports

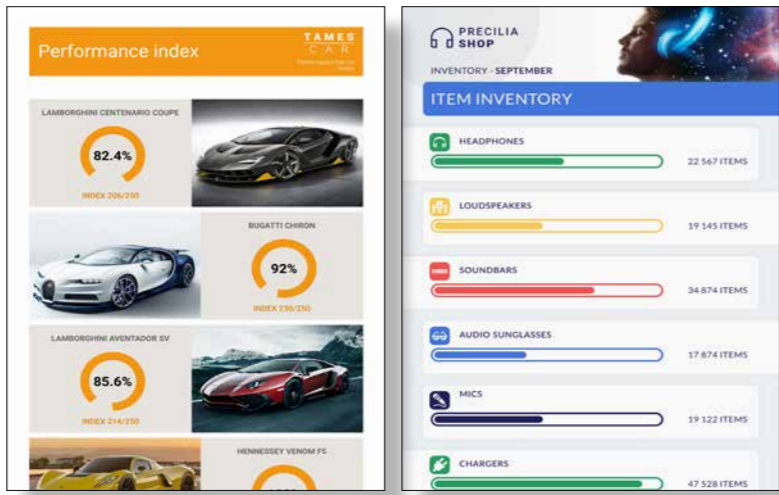


Gantt chart report generated by the report editor: clear and readable

# REPORT EDITOR: NEW PROGRESS BAR CONTROL

**104** New feature WD WB WM

In reports, progress bars are often used to represent data, instead of bar charts, for example. In version 26, the report editor supports Progress Bar controls: linear and circular progress bars.  
**Benefit provided by this new feature of version 26:**  
New visual possibility



Circular Progress Bars

Linear Progress Bars

# WLANGUAGE



# 105

New feature WD WB WM  
**GLOCALS:  
GLOBAL VARIABLES,  
BUT ONLY IN THEIR CONTROL**

Glocal variables are global variables, but with a scope limited to the control in which they are defined: they are both Global and loCal!  
Crazy?  
No!  
When a control is copied to another window, there is no longer any risk of forgetting these variables, since they are in the control!  
A Glocal variable is encapsulated in its control.  
This variable is accessible from all events of the control: it is no longer necessary to define this global variable in the window. Code becomes generally clearer.

```

[ ] Initializing EDT_VATCode
1  [ ] GLOBAL
2  |   gsPreviousValue is string
3  |
[ ] Entry in EDT_VATCode
1  |
2  |
[ ] Exit from EDT_VATCode
1  | // Has the value been changed?
2  | IF gsPreviousValue <> Myself..Value THEN
3  | | // Check new code
4  | | CheckVATCode().
5  | | END

```

**Benefit provided by this new feature of version 26:**  
Code that can be copied with its object

# 106

New feature WD WB WM  
**GLOCALS: PROCEDURES  
AND PROPERTIES**

You can also define procedures and properties that are local to the control.  
Thus, everything is encapsulated in the control.  
**Benefit provided by this new feature of version 26:**  
Power

# 107

New feature WD WB WM  
**GLOCALS: OVERRIDE WLANGUAGE  
FUNCTIONS AND PROPERTIES**

If you give one of your procedures or properties the same name as a WLanguage function, your procedure or property will be called instead of that function.  
This overrides WLanguage functions and properties: you can add a test in the function.  
Concrete example: It may be useful to override the **TableAdd** function to format data before adding it to the table (e.g., convert a birth date to age).  
**Benefit provided by this new feature of version 26:**  
Power

# 108

New feature WD WB WM  
**GLOCALS: DERIVE NATIVE  
CONTROLS**

By using the 3 previous new features of version 26, it becomes very easy to derive the native controls of WINDEV, WEBDEV and WINDEV Mobile.  
**Benefit provided by this new feature of version 26:**  
Power

# 109

New feature WD WB WM  
**CURRENT CONTROL: THIS**

The **This** keyword is used to access the current control. This makes it easier to write generic code.  
**Benefit provided by this new feature of version 26:**  
No need to change your habits

# 110

New feature WD WB WM  
**CALLBACK: DETECT WRONG  
PROTOTYPES AT COMPILE TIME**

In version 26, function calls can take a callback as parameter. This callback expects a certain number of parameters, of a certain type.  
If there is an error in these parameters, a compilation error is generated.  
**Benefit provided by this new feature of version 26:**  
No need to wait for the test (GO) to detect any errors

# 111

New feature WD WB WM  
**GMAIL, OFFICE 365: LOGIN WITH  
TWO-FACTOR AUTHENTICATION  
(IMAP, SMTP)**

More and more email servers are using two-factor authentication: Gmail, for example.  
In version 26, the **Email** functions used to access IMAP and SMTP servers support this type of authentication standard.  
When opening the connection to the server, for security reasons, the user will be required to enter the two-factor authentication code.





See new feature 112.

**Benefit provided by this new feature of version 26:**  
Up-to-date authentication

## 112 New feature WD WB WM IMPLEMENT TWO-FACTOR

### AUTHENTICATION (PDS2 EU DIRECTIVE)

Reminder: a standard functionality in the User Groupware allows you to automatically implement two-factor authentication in your applications (see new feature 086).

However, if you want to manage two-factor authentication in your applications or sites, you can use the following 3 new WLanguage functions:

`TwoFactorAuthenticationGenerateTOTPKey` generates the secret key passed to the third-party authentication app on the device, `TwoFactorAuthenticationGenerateLink` generates the QR Code that will be scanned by the authentication app,

`TwoFactorAuthenticationCheckCode` checks the code.

**Benefit provided by this new feature of version 26:**  
Custom two-factor authentication

## 113 New feature WD WB WM ARRAYS, SET OPERATIONS: UNION, INTERSECTION

In version 26, WLanguage proposes set functions on Array variables:

- Distinct, to remove duplicates
- Union, without duplicates
- Union, with duplicates
- Intersection.

**Benefit provided by this new feature of version 26:**

More efficient coding

## 114 New feature WD WB WM REGULAR EXPRESSIONS IN UNICODE

In version 26, the WLanguage functions for handling regular expressions also work in UNICODE: Chinese, Japanese, Russian, Arabic, Hebrew...

**Benefit provided by this new feature of version 26:**

Massive simplification

## 115 New feature WD WB WM REPLACE: REPLACEMENT ARRAY

The `Replace` WLanguage function is now more powerful. A set of characters to be replaced can be contained in an array.

A second array will include the replacement characters.

This avoids making successive calls, searching the string several times.

**Benefit provided by this new feature of version 26:**

Simpler code, better performance!

## 116 New feature WD WB WM WRITE AT THE BEGINNING OF TEXT FILES: FINSERTTEXTATBEGINNING

You want to write information in a LOG file with the most recent information at the beginning?

The new `fInsertTextAtBeginning` WLanguage function is exactly what you need!

Instead of adding data at the end of the file, this function

adds it at the beginning.

**Benefit provided by this new feature of version 26:**  
You can actually have it both ways

## 117 New feature WD WB WM SVG VECTOR IMAGE: MODIFY THE IMAGE BY PROGRAMMING

In version 26, you can modify the content of an SVG image by programming.

For example, replace a color, add or remove objects, add or modify text,...



*In this SVG image, the [VAL] characters will be replaced with the amount of the discount, by programming*

**Benefit provided by this new feature of version 26:**

Customize images by programming

## 118 New feature WD WB WM OAUTH TOKENS WITH EXPIRATION TIME: KEEP THEM ALIVE!

An oAuth token can have a expiration time set by its author: a few minutes, for example.

Once the token expires, it can no longer be used. If the application still needs that token, it will have to request a new authentication.

To avoid this, it may be convenient to keep the token active

beyond its expiration time.

This is now possible with the `AuthRefreshToken` WLanguage function.

**Benefit provided by this new feature of version 26:**  
The key to immortality?

## 119 New feature WD WB WM NEW FUNCTION DATETIMETOSTRING

`DateTimeToString` is used to directly convert a `DateTime` to string.

**Benefit provided by this new feature of version 26:**  
It's about time!

## 120 New feature WD WB WM TRACE FUNCTION: INCREASED SPEED

When the trace window integrated in the editor is displayed, the `Trace` function is 3 times faster.

**Benefit provided by this new feature of version 26:**  
Remarkable speed

## 121 New feature WD WB WM EXCEPTIONCHANGEPARAMETER WITH GLOBAL SCOPE

The `ExceptionChangeParameter` function can now be global to the project.

**Benefit provided by this new feature of version 26:**  
Practicality



122

New feature WD WB WM

**ZIP COMPRESSION FUNCTIONS: 2 NEW FUNCTIONS**

Reminder: `Zip` functions work with all compression methods, not only Zip! Two new functions have been introduced to the `zip` family:

`zipExtractDirectory`: extracts only the contents of a given directory  
`zipFilter`: returns the list of extensions supported by the version used: `zip`, `7z`, `rar`, `cab`, `wdz`, `tar`, `tgz` in version 26. Useful in combination with `fSelect`.

**Benefit provided by this new feature of version 26:**  
*Even more power*

123

New feature WD WB WM

**ZIP FUNCTIONS: THE USER CAN CANCEL DURING EXTRACTION**

To allow the end user to cancel an extraction process, the `zipExtractAll` function now accepts a Callback. By returning `False` in this callback, the process stops the extraction.

**Benefit provided by this new feature of version 26:**  
*Better UX*

124

New feature WD WB WM

**ZIP & GITHUB: SUPPORT FOR TAR.GZ (TGZ) FILES FROM GITHUB**

Compressed files returned by the Git Archive command are of a special format: `Tar.gz`.

This specific format is supported in version 26.

**Benefit provided by this new feature of version 26:**  
*Required format for Git*

125

New feature WD WB WM

**NEW POLYGON TYPE**

The new `Polygon` type has been introduced in WLanguage. This type can be used, for example, to draw lines in maps, images and charts, and to define text areas using native OCR.

**Benefit provided by this new feature of version 26:**  
*Now you draw the line*

126

New feature WD WB WM

**WRITE AN ENTIRE BOOK WITH 1 LINE OF WLANGUAGE CODE**

The new `GenerateLorem` function allows you to generate "Lorem ipsum" text of a given extension. This type of text is universally used in DTP to quickly material-

ize a text with variable content.

This text is random, pronounceable, but has no specific meaning...

**Benefit provided by this new feature of version 26:**  
*Fill areas without effort*

127

New feature WD WB WM

**THREAD TYPE: STORED RETURN VALUE**

When using several threads at the same time, some serious skills were required to memorize the return values of the different threads.

In version 26, `Thread` variables automatically memorize the value that will be returned in the procedure of the thread. To view this value, simply read this variable. That requires some not-so-serious skills!

**Benefit provided by this new feature of version 26:**  
*Why so serious?*

128

New feature WD WB WM

**SECURE THREADS**

Accessing a control from a thread is not recommended. Why? If a thread deletes a row from a Table control using its index, and the user adds a row to the table at the same time, the thread could delete the wrong row...

The new `<secure>` attribute has been introduced to avoid this kind of unpredictable behavior.

The procedure of the thread that would access a control (or that would call another procedure which accesses a control) with this attribute, generates a WLanguage warning error.

**Benefit provided by this new feature of version 26:**  
*Remarkable security*

129

New feature WD WB WM

**BUFFER COMPARISON**

Version 26 allows the immediate comparison of parts of buf-

fers.

2 syntaxes are available. Here are some examples:

```
buf is Buffer = [0xEF,0xBB,0xBF,0xCF,0x2F]
IF buf = [0xEF,0xBB,0xBF,0xCF,0xDD] THEN
IF buf[3 ON 5] = [0xBF,0xCF,0x2F] THEN
```

**Benefit provided by this new feature of version 26:**  
*Powerful comparison in 1 line of code*

130

New feature WD WB WM

**PDF FILE GENERATION: IMAGE SIZE**

When generating a PDF file by programming, the size of the images included in the file is adapted to the view and print size.

Initially large images will be reduced, therefore reducing the size of the PDF file.

You can still keep the image in its original size, or specify its exact definition.

**Benefit provided by this new feature of version 26:**  
*Smaller PDF files*

131

New feature WD WB WM

**SEARCH FOR A SET OF CHARACTERS WITHIN A STRING**

The `Position` function is used to determine the position of the first character of a set of characters in an array.

This function now returns 2 values (tuple): position in the string and character index in the array.

**Benefit provided by this new feature of version 26:**  
*Power*

**WEBSERVICES: CALLS**

132

New feature WD WB WM

**SOAP WEBSERVICE: ASYNCHRONOUS CALL****ASYNCHRONOUS**

Asynchronous calls to SOAP Webservices are now managed automatically.

The application is no longer blocked during the call, especially when the Webservice server does not respond!

**Benefit provided by this new feature of version 26:**  
*Applications are never blocked*

133

New feature WD WB WM

**REST WEBSERVICE: ASYNCHRONOUS REQUEST**

In version 26, you can also make asynchronous HTTP and HTTPS requests.

**Benefit provided by this new feature of version 26:**  
*Ideal for microservices*

134

New feature WD WB WM

**HTTPREQUEST: GET RECEIVED DATA AND HEADERS**

In version 26, you can view and analyze the details of the data and headers received with the `HttpRequest` function.

This makes it easier to perform advanced debugging operations.

The Callback in the `HttpRequest` variable for the trace process is called with 2 new constants: `HttpRequestHeaderReceived` and `HttpRequestDataReceived`.

**Benefit provided by this new feature of version 26:**  
*Valuable help in optimization processes*

135

New feature WD WB WM

**HTTPREQUEST: HTTP2 SUPPORT**

the HTTP2 standard allows for faster and safer browsing. This standard is supported in version 26.

**Benefit provided by this new feature of version 26:**  
*One additional standard supported*

**XML**

136

New feature WD WB WM

**XML SYNTAX HIGHLIGHTING IN MULTI-LINE STRINGS**

In the code editor, a multi-line string can contain XML code. In version 26, you can apply syntax highlighting to this code (context menu).

Note that this option was already available for SQL, HTML and WLanguage.

```
sXMLCode is string = [
<Synthesis>
  <Action_Total>
    <Week UniqueValue="245321"/>
    <Month UniqueValue="867234"/>
    <Day UniqueValue="35627"/>
  </Action_Total>
  <Active_User>
    <Week UniqueValue="2453"/>
    <Month UniqueValue="2387"/>
    <Day Values="[1705,2121,2001,2083]"/>
  </Active_User>
```



**Benefit provided by this new feature of version 26:**  
XML data is more readable

## OOP



### 137 New feature WD WB WM CALLBACK: PASS A METHOD AS PARAMETER

A function can take a Callback as parameter. In version 26, you can pass a method of an object for this Callback parameter. The instance of the object whose method is passed as parameter will be used.

**Benefit provided by this new feature of version 26:**  
Everything becomes simpler

### 138 New feature WD WB WM EQUALITY OPERATOR

The equality operator is introduced in OOP. This operator allows for code such as `if object1=object2`. It also allows you to search in an array of objects (`ArraySeek`).

**Benefit provided by this new feature of version 26:**  
Practicality

### 139 New feature WD WB WM COMPARISON OPERATOR

Comparison operators `<` and `>` are introduced in OOP. These operators allow you to easily sort objects (`arraySort`).

**Benefit provided by this new feature of version 26:**  
Less code

## IOT



### 140 New feature WD WB WM IOT: MODBUS



## SUPPORT



© Safran Helicopter Engine

Modbus is a communication protocol used in electronic devices, mainly in the industrial world. It's a free protocol. With the introduction of the new `Modbus` WLanguage functions, version 26 supports this protocol. These functions allow slaves to read and write: robots, sensors, display supports, machines... TCP and RTU protocols are supported.

**Benefit provided by this new feature of version 26:**  
Don't miss the (mod)bus!

### 141 New feature WD WB WM IOT: DATA COLLECTION BY A WEBDEV SERVER

Some sensors send data via the `HttpRequest` protocol. A web server is required to retrieve this data. The WEBDEV Application Server makes it easy to collect, store and use the data received! Version 26 includes a documented example on data collection and processing. Reminder: data can be hosted via PcsCloud.net, your own solution or any other hosting provider.

**Benefit provided by this new feature of version 26:**  
Better infrastructure

## HFSQL DATABASE



### 142 New feature WD WB WM ASYNCHRONOUS HFSQL QUERY EX- ECUTION: THE APPLICATION IS NOT BLOCKED WAITING FOR THE END OF THE QUERY

## ASYNCHRONOUS

In version 26, you can execute HFSQL queries asynchronously. The application is therefore "non-blocking". The end user can continue to use the application while the query is being executed on the server. Simply use the new syntax of the `HExecuteQuery` WLanguage function to pass the name of the Callback as parameter. The Callback will be called as the records are received. The number of records passed to the Callback is optimized according to many parameters: network speed, frame size, record size, server load...

**Benefit provided by this new feature of version 26:**  
Applications and sites don't have to wait anymore

### 143 New feature WD WB WM GDPR: DETERMINE IF AN ITEM IS GDPR RELEVANT

In the data model editor, you can indicate that the GDPR applies to a specific item. In version 26, this information can be retrieved by programming using the `.GDPR` property on the item. This allows for fine-processing of sensitive data.

**Benefit provided by this new feature of version 26:**  
Useful information by programming

### 144 New feature WD WB WM SEARCH FOR OPTIMIZATION ON A SPECIFIED QUERY

Need to optimize the speed of a particular query, or a set of queries? Need to check if a given query has been optimized? In version 26, you can run the optimization search functionality (check the presence of necessary keys) on a specified query or set of queries. If a set of queries is specified, any keys created will be optimized for the entire set. To optimize speed, simply use the `HSuggestKey` WLanguage function on the production site with the actual data. This function returns a status report of the same type as the one returned by the HFSQL engine.

**Benefit provided by this new feature of version 26:**  
Precise optimization





## 145 New feature WD WB WM START THE SEARCH FOR OPTIMIZATION: ON/OFF

You can also start the optimization of queries that are executed from one given moment (`HsuggestKeyStart`) to another (`HsuggestKeyEnd`).

This can be useful for optimizing the different queries executed during a particular process.

**Benefit provided by this new feature of version 26:**  
*Even more precision*

## 146 New feature WD WB WM TRIGGER: ACCESS THE VALUE OF ITEMS BEFORE MODIFICATION

It may be necessary to know the value of the items in the modified record before it is modified or deleted.

This is now possible with the `HTriggerRecordBefore` function.

**Benefit provided by this new feature of version 26:**  
*Extremely useful feature*

## 147 New feature WD WB WM AUTOMATIC CLEANUP OF "INTERNAL" WORKING DIRECTORY

The HFSQL engine uses a working directory named INTERNAL. In version 26, this directory is regularly emptied, so you won't have to do it anymore.

**Benefit provided by this new feature of version 26:**  
*Automatic cleanup!*

## 148 New feature WD WB WM DETERMINE IF A TRANSACTION IS IN PROGRESS

In version 26, you can determine if a transaction is in progress with the `HTransactionInProgress` WLanguage function.

**Benefit provided by this new feature of version 26:**  
*Very useful.*

## 149 New feature WD WB WM ASSISTED UNIVERSAL REPLICATION EDITOR: SIMPLIFIED UI

In version 26, the universal assisted replication benefits from clearer and more intuitive help:

- File addition plan
- Explanation of the different options

- Addition of connections from the replication editor
- ...

**Benefit provided by this new feature of version 26:**  
*Assisted replication creation is now easier*

## 150 New feature WD WB WM BACKUP WEBHOOK: CAPTION

A Webhook can be used to trigger the execution of a process at the end of the backup.

If an error occurs, the caption of the error is returned in addition to the error number.

**Benefit provided by this new feature of version 26:**  
*Additional automation*

## 151 New feature WD WB WM MISCELLANEOUS

The `HErrorInfo` function supports the `hErrCode` constant.

**Benefit provided by this new feature of version 26:**  
*Useful without a doubt*

## SQL FUNCTIONS

New feature WD WB WM

## 152 to 154 3 NEW SQL FUNCTIONS

3 new SQL functions are introduced in version 26. The SQL `Intersect` clause returns the records found in the 2 specified queries (Intersection).

|           |  |
|-----------|--|
| INTERSECT | Returns the records found in the 2 specified queries (intersection). |
| YEAR      | For compatibility with SQL code in MySQL.                            |
| MONTH     | For compatibility with SQL code in MySQL.                            |

**Benefit provided by this new feature of version 26:**  
*Enriched SQL*



## GRAPHIC QUERY EDITOR

## 155 New feature WD WB WM AUTOMATIC CREATION OF INSERT QUERY PARAMETERS

`INSERT` queries take as parameter the values of the items of the record to be added.

However, you have to create a parameter for each of these values!

In version 26, the query editor generates a parameter by default for each value.

**Benefit provided by this new feature of version 26:**  
*Automatic generation*

## 156 New feature WD WB WM SQL CODE EDITING

Any identifier (item name, parameter, etc.) selected in the query editor is highlighted wherever it is used in the code editor.

**Benefit provided by this new feature of version 26:**  
*Find it more easily*

## HFSQL SPARE

## 157 New feature WD WB WM PASSWORD MANAGEMENT FOR DATA FILES OPENED INDIRECTLY

HFSQL Spare is a near-real-time backup of a server. HFSQL Spare now allows you to check the integrity rules of linked files that have secure encryption.

**Benefit provided by this new feature of version 26:**  
*Useful*

## HFSQLDRIVE YOUR HFSQL DATABASES IN THE CLOUD IN 3 CLICKS

HFSQLDrive allows you to easily and immediately host your databases (tables) in the Cloud.

In version 26, the HFSQLDrive portal has been redesigned.

## 158 New feature WD WB WM HFSQLDRIVE: NEW PORTAL

The HFSQLDrive portal offers an improved UX:

- Simplified configuration and creation of an HFSQLDrive database
- Simplified configuration and creation of an SCMDrive team
- Improved interface.

**Benefit provided by this new feature of version 26:**  
*Perform less operations*

## HFSQL CONTROL CENTER

## 159 New feature WD WB WM SORT ITEMS (COLUMNS)

The HFSQL Control Center now allows sorting items (columns).

These items (columns) can be displayed in alphabetical or logical order.

**Benefit provided by this new feature of version 26:**  
*Faster search*

## 160 New feature WD WB WM GDPR

Reminder: in the data modeling, you can indicate that an item should comply with GDPR.

GDPR items are clearly identified when displayed in the Control Center.

This makes it possible to see them immediately.

**Benefit provided by this new feature of version 26:**  
*Data handling security*



## 161 New feature WD WB WM PRACTICAL ASPECTS

The HFSQL Control Center benefits from many other practical improvements.

Upon reconnection, the HFSQL Control Center automatically sets the position on the last table edited and reopens the previously opened tabs.

It is now possible to search in the list of replications of the server.

The log can be cleared from the Control Center.

**Benefit provided by this new feature of version 26:**

*Practicality*

## 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...

These Native Connectors keep evolving in version 26.

## 162 New feature WD WB WM NATIVE MS SQL SERVER CONNECTOR FOR LINUX: USEFUL FOR DOCKER

The Native MS SQL Server Connector (available separately) is now also available for Linux.

It allows a native connection to MS SQL Server.

It can also be used to deploy a site or a Webservice that accesses an MS SQL Server Linux database via Docker.

**Benefit provided by this new feature of version 26:**

*Useful addition*

## 163 New feature WD WB WM AS/400: MANAGEMENT OF NESTED STRUCTURES DEFINED IN THE PCML

One feature stands out among the many new features of the Native AS/400 Connector (available separately): IBM program calls that take nested structures and array structures as parameters.

Discover all the new features of the Native AS/400 Connector at WINDEV.COM.

**Benefit provided by this new feature of version 26:**

*Richer functionalities*

## BLOCKCHAIN



## 164 New feature WD WB WM GENERATE KEY AS A SEQUENCE OF WORDS

Private wallet keys must be kept secret. These are 256-bit keys.

To handle them more easily, **BufferToPhrase** and **PhraseToBuffer**, 2 new WLanguage functions, make it possible to transform these numerical keys into a sequence of words.

These words are taken from standard dictionaries (Bip39), which are provided in English, Spanish and French.

You can use your own dictionaries.

**Benefit provided by this new feature of version 26:**

*Never forget your keys again*

## TELEMETRY

Telemetry allows you to collect and aggregate nominative or anonymous information on how your applications are used: choice of selected menus, functionalities used, duration of processes and queries, possible bugs, use time ranges...

Telemetry also allows you to identify the OS versions and hardware configuration of end users, which is very useful, especially for software publishers.

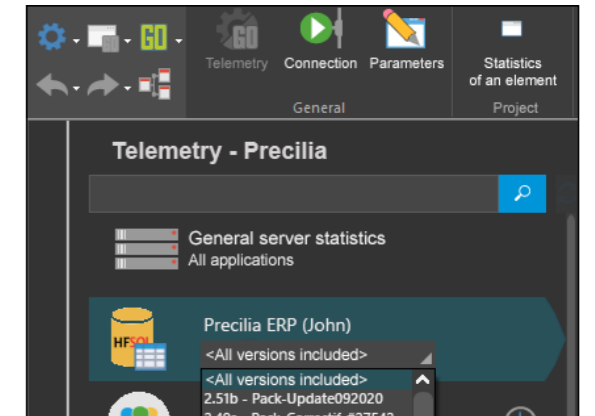
Telemetry evolves in version 26.

## 165 New feature WD WB WM VERSION LABELS

The data collected via telemetry is grouped by software version number.

When many versions have been deployed, it can be difficult to find your way around.

In version 26, you can attach a descriptive label to a version number.



*Clearer information*

**Benefit provided by this new feature of version 26:**

*Additional information*

## AUTOMATIC TESTS

## 166 New feature WD WB WM MANAGE HD & 4K SCREENS

In earlier versions of WINDEV, automatic tests had to be run on screens with the same resolution as the one used to record such tests.

In version 26, tests can be run on a screen with different resolution. For example, a test recorded on a 4K screen can be run on a 1.920 x 1.200 screen.

**Benefit provided by this new feature of version 26:**

*Even more generic automatic tests*







## MONITORING BOT (WATCHDOG)

### 167 New feature WD WB WM APPLICATION MONITORING WITHOUT NETWORK SHARE

In version 26, it is no longer necessary to set a network share between the machine that hosts the robot and the machines on which the applications to be monitored are run. This simplifies the implementation of the robot.

**Benefit provided by this new feature of version 26:**  
*Easier implementation*

### 168 New feature WD WB WM TEST FREQUENCY

It is now possible to create test frequency profiles. Now you can change the frequency of 150 tests in one single operation!

**Benefit provided by this new feature of version 26:**  
*Less actions required*

### 169 New feature WD WB WM USER PROFILE

The user profile is used to specify the means of communication that the robot must use to transmit the test report. It also allows you to select the tests that will be displayed by default in the application.

**Benefit provided by this new feature of version 26:**  
*Practicality*

### 170 New feature WD WB WM NETWORK ADMINISTRATOR: SELECT RELEVANT ALERT MESSAGES

Network administrators can now select the type of messages they want to receive. This ensures they will receive only relevant messages.

**Benefit provided by this new feature of version 26:**  
*Avoid being drowned in unnecessary messages*

### 171 New feature WD WB WM WEBHOOK MANAGEMENT: AUTOMATICALLY EXECUTE AN ACTION BASED ON THE TEST RESULTS

A webhook can be associated with each test. This webhook is used to start any process each time the status of the test changes.

For example, if a serious error is detected on an operating site, it can be used to automatically display a "Maintenance in progress" page on this site, or to switch automatically to a backup server.

**Benefit provided by this new feature of version 26:**  
*Create your own automations*

### 172 New feature WD WB WM AVAILABLE EXAMPLE: SERVICE STATUS WEBSITE

An example of a service status website (similar to Staytus) is provided. This example can be associated with the robot, and show the status of the different services that are managed in the monitoring robot: messaging, IP telephony, sales site,...

|   |              |
|---|--------------|
| Internet connection issues<br><small>last updated 2 hours ago</small>                           | Mon          |
| Hard drive change - AUTOTEST Server<br><small>end of maintenance expected in 42 minutes</small> | Maint        |
| Documentation site  | Maint        |
| Translation API   | Open         |
| Software factory  | Open         |
| TAMES sales site  | Partially ac |
| PRECILIA sales site   | Open         |
| TAMES web application   | Inacc        |

**Benefit provided by this new feature of version 26:**  
*Monitor your services without effort*

## BIG DATA

### 173 New feature WD WB WM MONGODB

For MongoDB databases, the new `MongoGridFSsendFile` WLanguage functions returns 2 values (tuple): a boolean and a `mongoGridFSfileInfo` variable which is used to directly retrieve the identifier of the added file.

**Benefit provided by this new feature of version 26:**  
*Immediate Information*



# My strength

### 174 New feature WD WB WM BENEFIT FROM THE 170 COMMON NEW FEATURES OF VERSION 26 IN WINDEV



WINDEV benefits from the 170 common new features in version 26, and in particular: higher speeds, non-modal editor, non-blocking required input fields, HTML control for emails, HTML programming functions, functionalities for maps, charts, more powerful style sheets, richer code editor, asynchronous HFSQL queries, new features of WLanguage, etc.

**Benefit provided by this new feature of version 26:**  
*Hundreds of new features for WINDEV in version 26*

## NEW: HTML CONTROL

### 175 New feature WD WB WM HTML: ESSENTIAL IN WINDEV

The new features related to HTML (new control, new control for emails, programming, new features 001 to 021) are incredibly useful in WINDEV.

The creation of rich emails is now a standard action, and the automatic management of data input in WINDEV saves time. The easy programming of HTML documents (including CSS and JavaScript) saves a lot of code in tasks that have become common today, for example: analyze the content of a website page to extract data (prices, stock, etc.) or to generate the content of an HTML page that will be displayed on a website. Version 26 brings power and efficiency every day.

**Benefit provided by this new feature of version 26:**  
*Your applications will gain more features*





## 6 NEW SMART CONTROLS IN WINDEV 26

### 176 New feature WD WB WM 6 NEW SMART CONTROLS IN WINDEV 26

Smart controls save time during the UI creation process, and immediately make you applications more sophisticated.

6 new Smart controls are introduced in WINDEV 26:

- Password creation help
- Video control with playback buttons
- Combo Box with check boxes
- Token in filter mode
- Time input with the mouse
- Bank-type PIN.

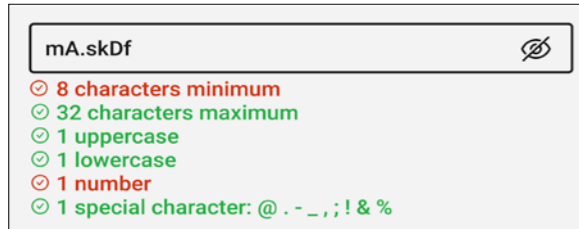
Reminder: Smart controls are provided with their source code, and are therefore completely modifiable and customizable.

**Benefit provided by this new feature of version 26:**  
Extremely useful controls

### 177 New feature WD WB WM NEW SMART CONTROL PASSWORD CREATION HELP

The "Password creation help" Smart control displays the list of rules that the user must follow to create a valid password. Rules are shown in red, and change to green once the password follows these rules.

Therefore, users will know exactly what they have to do. Everything is provided in source code, everything is customizable.



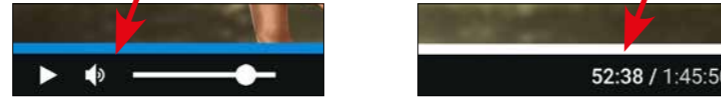
*The password creation rules are clearly shown*

**Benefit provided by this new feature of version 26:**  
Users will love this feature

### 178 New feature WD WB WM NEW SMART VIDEO CONTROL WITH PLAYBACK BUTTONS

The Smart "Video control with playback buttons" allows you to play and pause videos, switch to full screen, show a progress bar, etc.

This control is ready to use, like all the Smart controls!

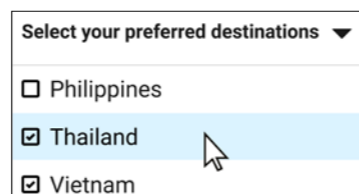


*Everything is included in the control, but everything can be modified and customized.*

**Benefit provided by this new feature of version 26:**  
All the main features are supported

### 179 New feature WD WB WM NEW SMART CONTROL COMBO BOX WITH CHECK BOXES

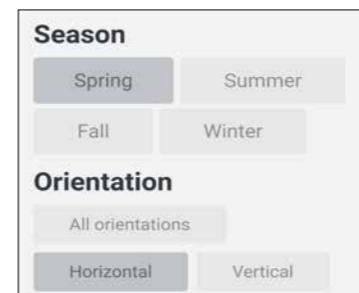
The "Combo Box with check boxes" Smart control allows you to include a list of options in a combo box, with multiple selection.



*Multiple selection in combo boxes*

**Benefit provided by this new feature of version 26:**  
Check boxes in a combo box!

### 180 New feature WD WB WM NEW SMART CONTROL TOKEN IN FILTER MODE



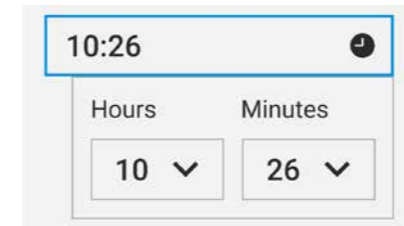
*Unlimited style possibilities*

The "Token in filter mode" Smart control offers an elegant and intuitive interface to define active and inactive options. These options are clickable.

**Benefit provided by this new feature of version 26:**  
Intuitive filter

### 181 New feature WD WB WM NEW SMART CONTROL ASSISTED TIME INPUT

The "Assisted time input" Smart control is used to enter hours and minutes using the mouse only.



*Enter times without using the keyboard*

**Benefit provided by this new feature of version 26:**  
It's about time

### 182 New feature WD WB WM NEW SMART CONTROL PIN CODE INPUT

The "PIN code input" Smart control is available in WINDEV. (see new feature 658).

**Benefit provided by this new feature of version 26:**  
The safer, the smarter

## TABLE CONTROL NEW FEATURES

The Table control is one of the most powerful and widely used controls in WINDEV applications. In version 26, your tables are even richer.

### 183 New feature WD WB WM TABLE CONTROL: 50% FASTER MEMORY BINDING

In version 26, the memory binding speed has been drastically improved! Already ready!

**Benefit provided by this new feature of version 26:**  
Speed

### 184 New feature WD WB WM DOUBLE CLICK ON COLUMN

The new event `Double click on column` (of a table) allows defining a custom process to be run when this table column is double-clicked on.

**Benefit provided by this new feature of version 26:**  
Even finer programming on tables

### 185 New feature WD WB WM DOUBLE CLICK ON BREAK

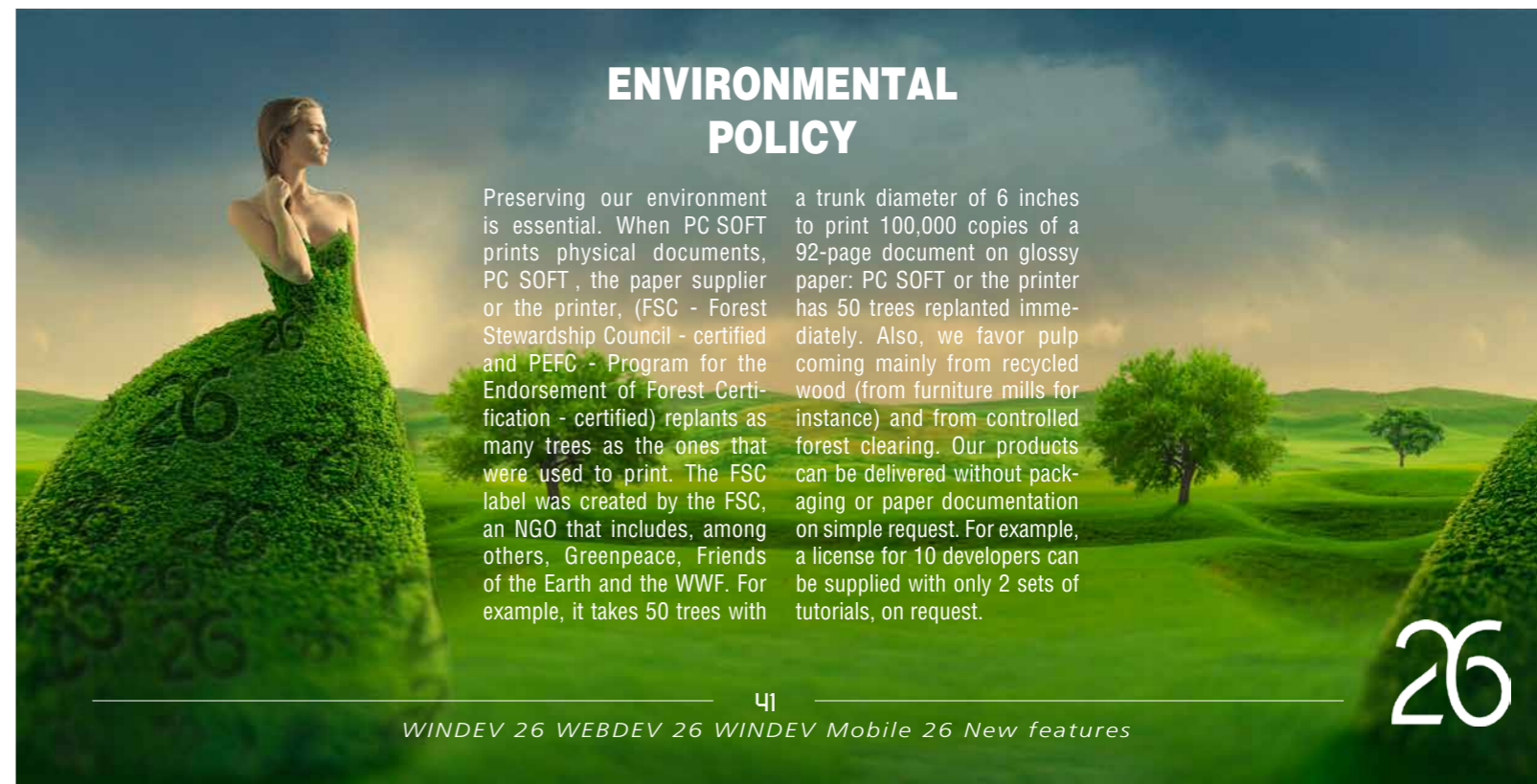
A new behavior has been introduced in the tables: double-clicking on an break expands or collapses this break.

**Benefit provided by this new feature of version 26:**  
Automatic behavior

## ENVIRONMENTAL POLICY

Preserving our environment is essential. When PC SOFT prints physical documents, PC SOFT, 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 FEATURES OF CONTROLS

### 186 New feature WD WB WM REQUIRED INPUT FIELD: THE USER CAN EXIT THE FIELD

This new feature brings freedom to end users. They are no longer "locked" in a required field until a valid value is entered. They can now exit the field and fill it later. See new feature 045.

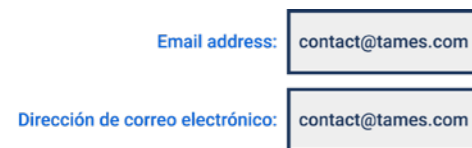
**Benefit provided by this new feature of version 26:**  
*Freedom for end users*

### 187 New feature WD WB WM EDIT CONTROL: CAPTION ALIGNED TO THE RIGHT

Aligning the caption of an Edit control to the right opens new customization possibilities.

In version 26, you can align a caption of an Edit control to the right, against the input area.

This layout is particularly suitable for multilingual UIs, where the length of the text varies according to the language: this prevents gaps between the text and the input field.



*Customize you UIs even further*

This option is also available for Combo Box controls.



**Benefit provided by this new feature of version 26:**  
*Great addition for multilingual UIs*

### 188 New feature WD WB WM CUSTOMIZABLE TOOLTIPS

In version 26, the tooltips of controls can be customized. You can customize:

- borders
- background colors and images
- appear and disappear animations (if any)
- arrows
- text margins.

A set of superb preset looks is provided!



**Benefit provided by this new feature of version 26:**  
*Stunning tooltips!*

### 189 New feature WD WB WM PVT: AUTOMATIC COLUMN WIDTH REDUCTION

The Pivot Table control (ROLAP cube) offers a new layout option: automatic line wrap, without increasing the column width.

The automatic line wrap option limits the column width, thus making it possible to view more columns on the screen.

**Benefit provided by this new feature of version 26:**  
*Even clearer PVTs*

### 190 New feature WD WB WM RIBBON: DETACHABLE TAB

End users can detach the tabs from the ribbons in your applications, once these applications are recompiled in version 26. This will allow end users to view their most frequently used options at all times!

Simply check the "Detachable" option in the 7-tab window of the ribbon.

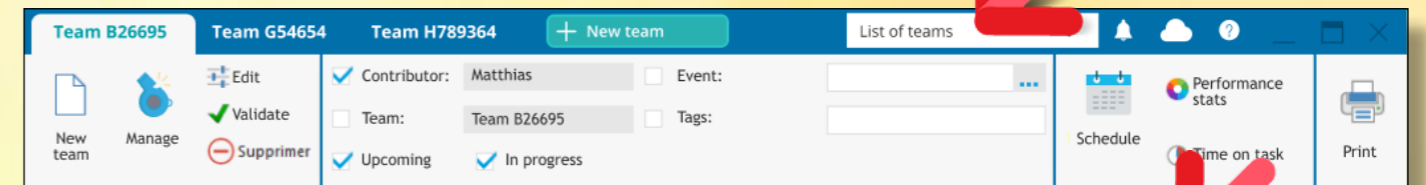
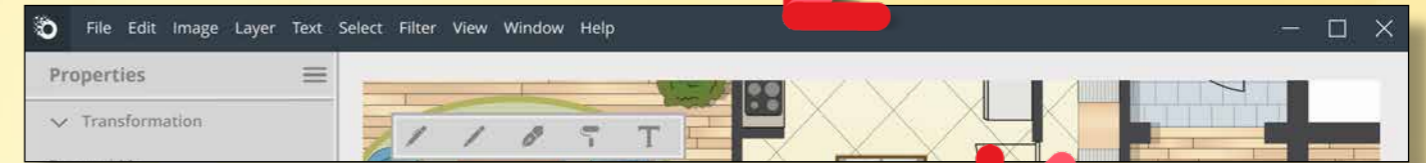
**Benefit provided by this new feature of version 26:**  
*Options available at all times*

### 191 New feature WD WB WM SPELLING CHECKER: SPANISH AS STANDARD

¡Magnífico!  
Enabled in the environment and in your applications.

**Benefit provided by this new feature of version 26:**  
*Se habla español*

## MENU AND CONTROLS IN THE TITLE BAR MODERNIZE YOUR UI, SAVE SPACE



| TAMES Holdings |                           |              |                          |                      |            |           |                |                      |                       |
|----------------|---------------------------|--------------|--------------------------|----------------------|------------|-----------|----------------|----------------------|-----------------------|
|                | A                         | B            | C                        | D                    | E          | F         | G              | H                    |                       |
| 1              |                           |              |                          |                      |            |           |                |                      | <b>Task Execution</b> |
| 2              | <b>Process name</b>       | <b>% Run</b> | <b>% to the 33 tasks</b> | <b>Activity name</b> | <b>Yes</b> | <b>No</b> | <b>Partial</b> | <b># total tasks</b> |                       |
| 3              | <b>Project management</b> |              |                          |                      |            |           |                |                      |                       |
| 4              |                           | 50%          | 14%                      | GP1-Project planning | 0          | 0         | 9              | 9                    |                       |

### 192 New feature WD WB WM NEW TYPES OF ACTIONS ON WINDOWS

There is a new trend in UI design: application menus in the title bar!

In version 26, you can use any type of control in the title bar of a window.

This makes it possible to modernize and simplify the interfaces.

For example, the main menu can be located in the title bar. Positioning controls in the title bar also saves space.

You can position the controls in the editor, in WYSIWYG mode.

**Benefit provided by this new feature of version 26:**  
*Windows with a modern look*

- link
- ...

Now you can create new UIs!

**Benefit provided by this new feature of version 26:**  
*A modern, useful bar*

### 194 New feature WD WB WM MENU IN THE TITLE BAR

In version 26, you can position a menu in the title bars of the windows in your applications.

You can use other controls next to the menu. Menus can be combined with ribbons.

**Benefit provided by this new feature of version 26:**  
*Modern combination*

### 193 New feature WD WB WM CONTROL (INPUT OR DISPLAY), BUTTON, IMAGE... IN THE TITLE BAR

All types of controls can be positioned in the title bar:

- menu
- edit control: search,...
- text: name of connected user, ...
- image: avatar, notification bell, number of messages...
- button: undo/redo, frequent actions...

### 195 New feature WD WB WM BURGER MENU IN THE TITLE BAR

Burger menus in title bars are also a current trend in UI design!

In version 26, all you have to do is position a "burger menu" button in the title bar. This button will open a popup window or menu, for example.

**Benefit provided by this new feature of version 26:**  
*Useful and modern*

*Continues page 44...*



## 196 New feature WD WB WM CHECK BOX & RADIO BUTTON CONTROLS: ACCESS OPTIONS BY PROGRAMMING VIA THEIR CAPTIONS

In earlier versions of WINDEV, the options of Check Box and Radio Button controls could only be accessed using their indexes, for programming purposes.

It was a hidden source of mistakes. When an option was added or deleted in a 7-tab window, the indexes changed without warning: The developer had to immediately change these indexes in the source code.

In version 26, you can use the caption of the option for programming.

If a caption is added or deleted, it does not change the code. The code becomes:

```
CheckBox.Food = True
```

In multilingual projects, you can use the caption in the language of your choice.

```
CheckBox.Comida = True
```

If a caption is modified in the 7-tabs window and not in the code, a compilation error is displayed.

**Benefit provided by this new feature of version 26:**

*Easily handle these controls by programming*

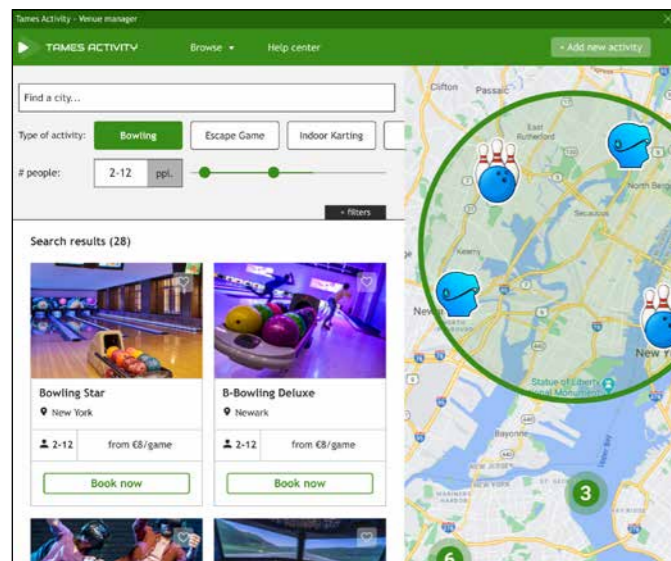
## 197 New feature WD WB WM TAB PANE: ACCESS PANES BY THEIR NAMES

The access to panes evolves in the same way as the access to Check Box controls: it is now possible to use the caption of the pane in the code, instead of its index.

**Benefit provided by this new feature of version 26:**

*No index? No problem*

## 198 New feature WD WB WM MAP CONTROL: EVOLUTIONS



The possibilities of the Map control take an incredible leap forward in version 26!

Automatic clusters, marker options, geometric shapes, images, popups, limitation to a geographic area, image tilt, ... See new features 022 to 031.

**Benefit provided by this new feature of version 26:**

*Even more sophisticated maps*

## 199 New feature WD WB WM 5-STATE BUTTON CONTROLS

5-state buttons have a "Hover" state and a "Focus" state.

The "Hover" state had priority over the "Focus" state.

In version 26, the "Focus" state becomes priority.

**Benefit provided by this new feature of version 26:**

*A more logical behavior*

## 200 New feature WD WB WM EDIT CONTROLS: MISCELLANEOUS

- You can apply a "file" input mask to Edit controls. When this mask is applied, an auto complete feature shows all the files in the directory. In version 26, you can filter these files by extension.
- Token edit control: the color of the text entered may be similar to the color of the selected token; the text is therefore no longer visible. In version 26, an option allows you to define an adaptive text color.
- Edit control with custom mask: custom masks can be set by programming using `Mask` variables. A new Callback is called automatically when a value is assigned to the control.

**Benefit provided by this new feature of version 26:**

*More refined programming on Edit controls*

## HELP IN YOUR APPLICATIONS

### 201 New feature WD WB WM GENERATED HELP: MANAGEMENT OF REPORT LAYERS

Reports can consist of several layers.

In version 26, a help document is automatically generated for each layer of the report.

**Benefit provided by this new feature of version 26:**

*Down to the details*

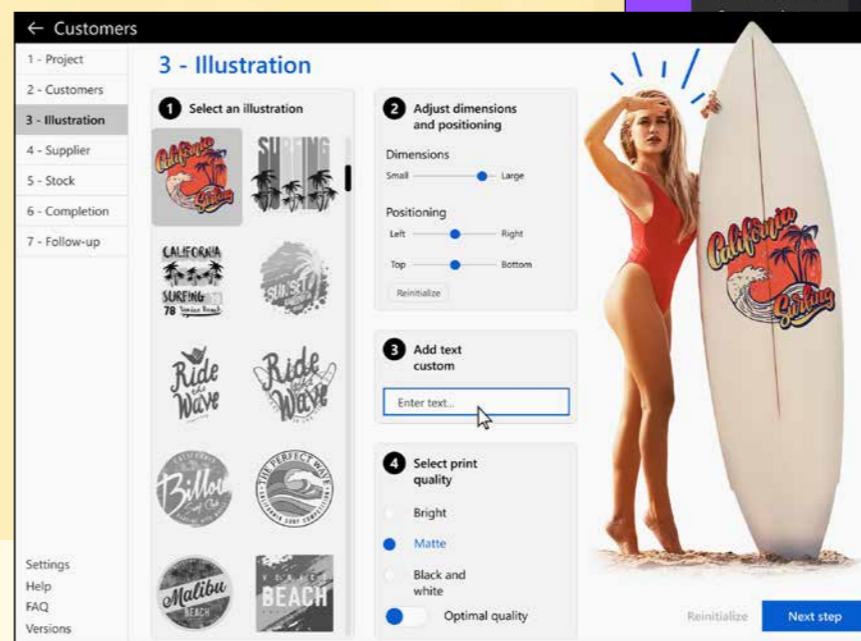
## 202 New feature WD WB WM 2 NEW SKIN TEMPLATES FOR WINDEV

The Suki and Winki skin templates are introduced in version 26.

This offers you new possibilities for customization.

**Benefit provided by this new feature of version 26:**

*Express new look!*



Use these templates in your applications and software packages, as well as 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.

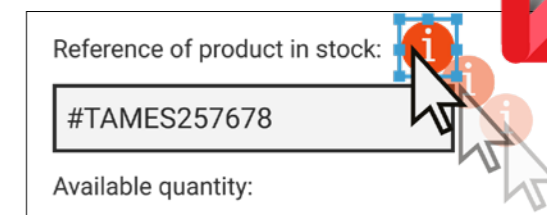
## BUSINESS RULES & IBR ICON

Reminder: WINDEV allows you to enter "Business Rules". These are explanations on the process associated with an item, code, window, process, calculation, etc...

An IBR (Integrated Business Rules) icon displays the public data of these Business Rules, which automatically serve as help for end users.

### 203 New feature WD WB WM POSITIONING WITH THE MOUSE

In version 26, an IBR icon can be positioned anywhere around its associated control, using the mouse.



**Benefit provided by this new feature of version 26:**

*Position this useful icon wherever you want*



## ENVIRONMENT

### 204 New feature WD WB WM COMMON NEW FEATURES

WINDEV's environment benefits from the common new features (see new features 059 to 073). The new multi-window environment in particular will become essential in your development projects (see new feature 065). The new project explorer is also a remarkable addition (see new feature 063).



Management of margins in the environment

**Benefit provided by this new feature of version 26:**  
An ever richer environment

## WINDOW EDITOR

### 205 New feature WD WB WM WINDOW TEMPLATE: MARGINS ARE TAKEN INTO ACCOUNT

New features are added to the window templates: the changes made to the window template margins are now taken into account. If a margin is modified in the template, this change will be applied to all the windows that use that template. In a given window, you can override the margins so as not to apply the changes made to the template.

**Benefit provided by this new feature of version 26:**  
Your windows improve by a wide margin!

### 206 New feature WD WB WM SET MARGINS AND RULERS USING NUMERICAL VALUES

Rulers and margins are defined in WYSIWYG mode, using the mouse. In version 26, you can also set margins and rulers by directly entering their values in pixels.

**Benefit provided by this new feature of version 26:**  
Margins and rulers with pixel precision

### 207 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 26:**  
Already ready

## INSTALL

**URGENT**

### 208 New feature WD WB WM UPDATE PROMPT IN A RUNNING APPLICATION

Applications automatically check for updates on launch, and prompt the user if an update is available. This is an automatic and standard mechanism.

In version 26, a running application can also prompt the user to install an update.

This is useful if a critical or urgent bug has been fixed during the day, for example.

The user is prompted to update the application via a toast message.

This update may be optional or mandatory.

**Benefit provided by this new feature of version 26:**  
Bug-fix releases in no time!

### 209 New feature WD WB WM AUTOMATIC DOWNLOAD OF EXECUTION FRAMEWORK: FTP OR HTTPS

If the WINDEV framework is not installed on a machine, users are prompted to download it when a WINDEV EXE is launched.

In earlier versions of WINDEV, you could only download this framework by FTP.

In version 26 you can also download it by HTTPS: this eliminates the problem of ports to open in firewalls.

**Benefit provided by this new feature of version 26:**  
Choose what you prefer

## AAF: AUTOMATIC APPLICATION FEATURES

### 210 New feature WD WB WM VISUAL REMINDER

AAFs are an incredible source of useful features for your end users.

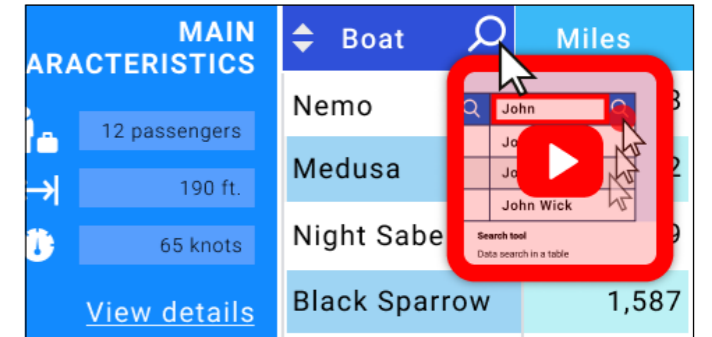
As you know, there is nothing to code, nothing to think about, yet your users benefit from practical features.

In version 26, if a control has an AAF, an animation can be triggered to present this AAF when the user hovers over the control.

For example, if the end user hovers over the "magnifying glass" of a table column, the different search options ("contains", "starts with", etc.) are presented.

End users can disable each animation.

The whole mechanism can also be disabled by programming.



*If a control or button has an AAF, a small window reminds the user of this feature*

**Benefit provided by this new feature of version 26:**  
Now your users know

### 211 New feature WD WB WM DEFINE THE FIRST CONTROL IN EDIT MODE

In version 26, end users can define which control will be in edit mode when the window or page is opened.

**Benefit provided by this new feature of version 26:**  
First will always be first

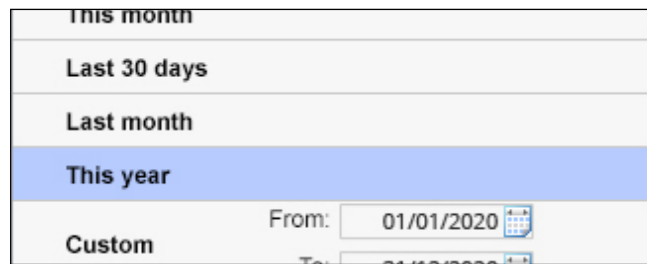






## 212 New feature WD WB WM PVT: COMPARE DATA BY YEAR

Pivot Table controls (PVTs) allow you to automatically compare data over preset periods of time. In version 26, PVTs also allow comparing data over a year.



**Benefit provided by this new feature of version 26:**  
Easy comparisons

## JAVA



## 213 New feature WD WB WM STRING COMPARISON SYNTAX

In version 26, the string comparison syntax (Starts with [~ , etc.) is supported in Java.

**Benefit provided by this new feature of version 26:**  
Standardization

## 214 New feature WD WB WM TYPE INFERENCE

In version 26, it is possible to declare a variable without having to declare its type.

```
let Amount = 1500.69 // real
let City = "Memphis" // string

// Multiple inference via a procedure returning multiple values
-> returns for example ("Cashmere sweater", 2)
let (ProductName, Quantity) = Get_ProductAndQuantity_ofOrdLine()
```

**Benefit provided by this new feature of version 26:**  
Concise syntax

## 215 New feature WD WB WM GLOCAL VARIABLES

In version 26, Glocal variables (Global variable with a scope limited to the control) are available in WINDEV Java. (see new feature 105).

**Benefit provided by this new feature of version 26:**  
Useful when copying controls

## 216 New feature WD WB WM OVERLOADED PROCEDURES

In version 26, in Java, you can create several variants of the same procedure, which will accept different types of parameters.

**Benefit provided by this new feature of version 26:**  
Practicality

## 217 New feature WD WB WM JAVA: MISCELLANEOUS

- The `..EmptyIfZero` and `..Grayed` properties are available in Java.
- The `DateTimeToString` function is available.
- The new `trtBeforeClosingWindow` constant is available.
- The `This` keyword is enabled (current control).

**Benefit provided by this new feature of version 26:**  
It is the small things that make a difference

## 218 New feature WD WB WM 5 NEW WLANGUAGE FUNCTIONS

WLanguage offers 5 new functions for Java.

|                                    |                       |
|------------------------------------|-----------------------|
| DateTimeToString                   | InWebSocketServerMode |
| InWebSocketServerGlobalServiceMode | HTrack                |
| HTrackStop                         |                       |

## LINUX



## 219 New feature WD WB WM CUSTOM MASK

In version 26, the `InputMask` advanced type is available on Linux.

**Benefit provided by this new feature of version 26:**  
Better cross-platform

## 220 New feature WD WB WM WLANGUAGE FUNCTIONS TO MANAGE CONTINUOUS INTEGRATION AVAILABLE ON LINUX

**Action** functions are now available on WINDEV Linux. This family of functions is used to trigger the execution of an action plan, define its parameters, follow its progress, etc.

**Benefit provided by this new feature of version 26:**  
Continuous Integration in Linux

## 221 New feature WD WB WM QT5 SUPPORT

The graphics engine used by WINDEV Linux is upgraded to Qt5.

**Benefit provided by this new feature of version 26:**  
A more recent engine

New feature WD WB WM

## 222 to 276 55 NEW FUNCTIONS 38 NEW LINUX CONSTANTS FOR WINDEV

WLanguage offers 55 new functions and 38 new constants (to discover on the online help) for Linux.

|                            |                        |                                    |                     |
|----------------------------|------------------------|------------------------------------|---------------------|
| AJAXCallInProgress         | BufferToPhrase         | MapClosePopup                      | DateTimeToString    |
| LastDayOfYear              | InWebSocketServerMode  | InWebSocketServerGlobalServiceMode | ErrorReset          |
| flnsertTextAtBeginning     | GenerateLorem          | geoGetArea                         | gpwPageURL          |
| HJSONToRecord              | HSuggestKey            | HSuggestKeyStart                   | HSuggestKeyEnd      |
| HTMLFindElementById        | HTMLFindElementByName  | HTMLBuildString                    | HTMLOpen            |
| HTMLSave                   | HTransactionInProgress | HTriggerRecordBefore               | MaskZipCode         |
| MaskFormat                 | MaskPhoneNumber        | ModbusConnectRTU                   | ModbusConnectTCP    |
| ModbusDisconnect           | ModbusWriteBit         | ModbusWriteFloat                   | ModbusWriteRegister |
| ModbusReadBit              | ModbusReadFloat        | ModbusReadRegister                 | OCRLoadLanguage     |
| OCRDetectTextArea          | OCRExtractTextBlock    | OCRExtractText                     | OCRParameter        |
| OCRModelPathDirectory      | OCRDeleteAllLanguages  | PhraseToBuffer                     | sListPort           |
| ArrayDistinct              | ArrayIntersect         | ArrayUnion                         | ArrayUnionAll       |
| WebSocketDisconnect        | WebSocketSend          | WebSocketRun                       | WebSocketListUser   |
| WebSocketGlobalServiceWait | zipExtractDirectory    | zipFilter                          |                     |

## .NET

## 277 New feature WD WB WM PARAMETERS: 1-BYTE INT, 2-BYTE INT; USEFUL FOR OPC

PLCs often requires precise byte sequences. You can now use the `1-byte int` and `2-byte int` options for controlling robots via .Net assemblies. Programming is easier.

**Benefit provided by this new feature of version 26:**  
More precise programming







|                                    |  |
|------------------------------------|--|
| HTMLEditorFormatSelection          | Modifies the style of the selected elements in an HTML Edit control.                             |
| HTMLEditorInsert                   | Inserts text or html into an HTML Edit control.  |
| HTMLEditorInsertTable              | Inserts a table into an HTML Edit control.   |
| HTMLEditorSearch                   | Searches for a string in an HTML Edit control.   |
| HTMLEditorGet                      | Reads the value of one of the properties of an HTML Edit control asynchronously.                 |
| HTMLEditorGetDocument              | Retrieves the HTML document being edited in an HTML Edit control in asynchronous mode.           |
| HTMLEditorGetSelection             | Retrieves the selected elements in an HTML Edit control in asynchronous mode.                    |
| HTMLEditorReplace                  | Replaces a string with another one in an HTML Edit control                                       |
| HTMLEditorSelect                   | Selects a text fragment in an HTML Edit control  |
| HTMLEditorToPDF                    | Converts the HTML content in an HTML Edit control to a PDF file.                                 |
| InWebSocketServerMode              | Indicates whether the code is executed via the WebSocket server.                                 |
| InWebSocketServerGlobalServiceMode | Indicates whether the code is executed via the global service of the WebSocket server.           |
| ErrorReset                         | Resets the detection of non-fatal errors.  |
| fnInsertTextAtBeginning            | Inserts text at the beginning of a file without overwriting the existing text.                   |
| GenerateLorem                      | Generates a «Lorem ipsum» text.  |
| geoGetArea                         | Retrieves the coordinates of the geographic area.  |
| gpwPageURL                         | Returns the URL of a page of the user groupware site.  |
| HJSONToRecord                      | Imports JSON data into the current record.   |
| HSuggestKey                        | Suggests a list of keys to add to data files to improve query performance.                       |
| HSuggestKeyStart                   | Starts collecting information on queries to improve performance.                                 |
| HSuggestKeyEnd                     | Suggests a set of keys to add to your data files to improve query performance.                   |
| HTMLFindElementById                | Searches for an element by its ID.   |
| HTMLFindElementByName              | Searches for one or more elements by name.   |
| HTMLBuildString                    | Returns the content of an HTML document.   |
| HTMLExecuteBrowserProcedure        | Executes a WEBDEV browser procedure in an HTML control that displays a page created with WEBDEV. |
| HTMLExecuteControlProcess          | Executes the code of a control in an HTML page in an HTML control.                               |
| HTMLOpen                           | Loads an HTML document.  |
| HTMLSave                           | Saves an HTML document.  |
| HTMLControlValue                   | Retrieves or assigns an HTML form field in an HTML control                                       |
| HTMLValidateForm                   | Validates the form of an HTML page in an HTML control.   |
| HTransactionInProgress             | Indicates whether a transaction is in progress.  |
| HTriggerRecordBefore               | Retrieves the value of the record before the execution of the triggers.                          |

|                            |  |
|----------------------------|--|
| PDFReaderInfoXY            | For a given position in a PDF Reader control, returns the number of the corresponding page, or the X or Y position (in mm).                                  |
| ModbusConnectRTU           | Establishes and connects to a Modbus RTU session.  |
| ModbusConnectTCP           | Establishes and connects to a Modbus TCP session.  |
| ModbusDisconnect           | Disconnects the Modbus session   |
| ModbusWriteBit             | Writes one or more bits to the Modbus session.   |
| ModbusWriteFloat           | Writes one or more floats to the Modbus session  |
| ModbusWriteRegister        | Writes one or more (16-bit) words to the Modbus session.   |
| ModbusReadBit              | Reads one or more bits from the Modbus session.  |
| ModbusReadFloat            | Reads one or more floats from the Modbus session.  |
| ModbusReadRegister         | Reads one or more registers from the Modbus session.   |
| OCRLoadLanguage            | Adds an OCR language.  |
| OCRDetectTextArea          | Returns all text areas of an image without reading the text  |
| OCRExtractTextBlock        | Returns all the text blocks of an image.   |
| OCRExtractText             | Reads the text contained in an image.  |
| OCRParameter               | Initializes the general options of the OCR system.   |
| OCRModelPathDirectory      | Sets the directory that contains the models for the OCR system   |
| OCRDeleteAllLanguages      | Deletes all languages from the OCR system.   |
| PhraseToBuffer             | Converts text to buffer.   |
| sListPort                  | Lists the names of serial and parallel ports on the machine  |
| StyleDrawCaptionGrayed     | Customizes the drawing style of captions in controls that are grayed out.  |
| ArrayDistinct              | Returns an array without duplicates.   |
| ArrayIntersect             | Returns an array corresponding to the intersection of two arrays.  |
| ArrayUnion                 | Returns an array corresponding to the union of two arrays.   |
| ArrayUnionAll              | Returns an array corresponding to the union of two arrays (without deleting duplicates).   |
| URISelect                  | Opens a system window to select a resource coming from the device's file system, from the Cloud or from one of the content managers installed on the device. |
| WebSocketDisconnect        | Disconnects a client currently connected to the WebSocket server.  |
| WebSocketSend              | Sends a message to a WebSocket server client.  |
| WebSocketRun               | Executes a procedure in the context of a client connected to the WebSocket server.   |
| WebSocketListUser          | Lists the clients connected to the WebSocket server.   |
| WebSocketGlobalServiceWait | Pauses the loop of a service.  |
| zipExtractDirectory        | Automatically extracts and decompresses files from a directory in the file tree of an archive to a physical location.  |
| zipFilter                  | Returns the list of supported archive formats.   |



## 653 New feature WD WB WM WINDEV MOBILE 26 BENEFIT FROM THE 170 COMMON NEW FEATURES OF VERSION 26



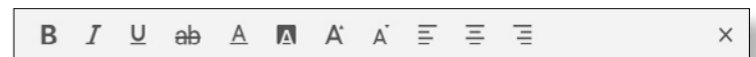
WINDEV Mobile benefits from most of the 170 common new features in version 26, and in particular: new Smart controls, non-blocking required input fields, HTML control for emails, HTML programming functions, functionalities for maps, charts, simpler style sheets, richer code editor, asynchronous HFSQL queries, new features of WLanguage, etc...

Of course, WINDEV Mobile 26 also benefits from many new features specific to the mobile world. Learn more in the following pages.

## NEW: HTML EDIT CONTROL AND FOR EMAIL & PROGRAMMING

### 654 New feature WD WB WM USE HTML ON MOBILE DEVICES AS WELL

The new HTML Edit control, HTML email control and HTML programming functions are available for your mobile applications. The new HTML Edit control allows users to enter HTML texts in WYSIWYG mode from a mobile device or tablet. This allows entering rich text, with formatting options. The new email control allows users to enter rich-text emails from a phone. HTML programming allows you to analyze Internet pages, for example, and to extract data from them.



HTML formatting toolbar for mobile devices

Each update to version 26 entitles you to 15 free technical support requests at PC SOFT. In version 26, your teams benefit from Free Technical Support\*!

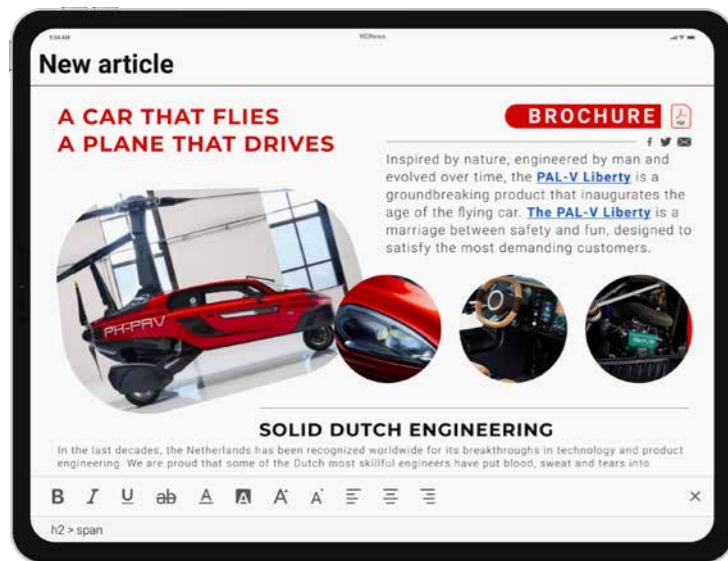
**NO WORRIES...**

UNIQUE SERVICE

**FREE  
SUPPORT**

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

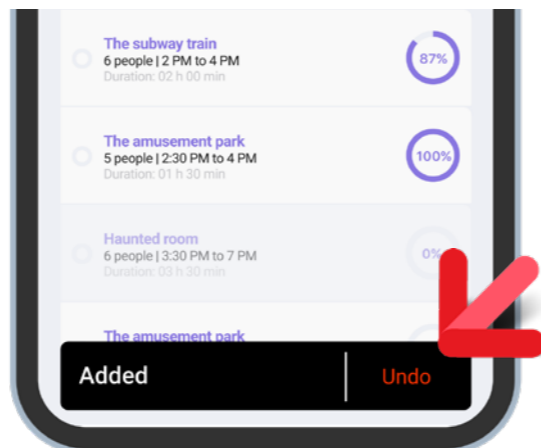




Easy HTML editing on mobile devices in version 26

## 656 New feature WD WB WM NEW SMART CONTROL SNACKBAR (WITH CANCEL BUTTON)

The "Snackbar" Smart control is a toast message that allows a user action, generally to undo the action that has just been performed.

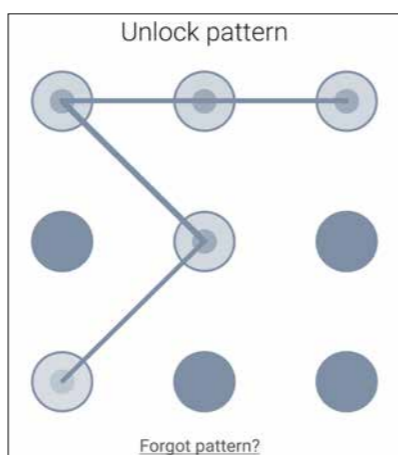


The Undo button is shown for a few seconds and allows the user to undo the action that has just been performed

**Benefit provided by this new feature of version 26:**  
Let's toast to second chances!

## 657 New feature WD WB WM NEW SMART CONTROL UNLOCK PATTERN

The "Unlock pattern" Smart control allows you to use an unlock pattern specific to your application. A practice and an unlock mode are provided.

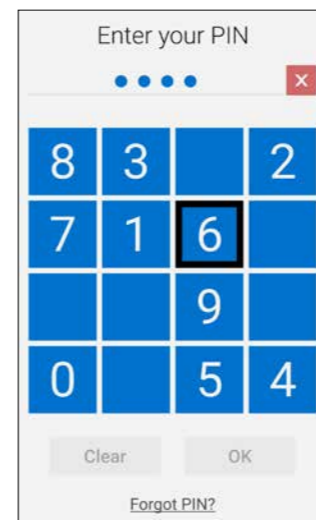


To include in your applications

**Benefit provided by this new feature of version 26:**  
Secure access to your applications

## 658 New feature WD WB WM NEW SMART CONTROL BANK-TYPE PIN CODE INPUT

The "Bank-type PIN code input" Smart control is a set of randomly positioned numbers. You can configure how many digits are required.



Standard input

**Benefit provided by this new feature of version 26:**  
Standard, modern code input

## WINDEV MOBILE IN WINDEV EDITOR

### 659 WD WB WM REMINDER: WINDEV OPENS AND HANDLES WINDEV MOBILE PROJECTS

To make cross-platform development easier, WINDEV can open WINDEV Mobile projects (and WEBDEV projects as well). This avoids duplicating code and objects and performing unnecessary operations. Objects are shared immediately. The same project in WINDEV can contain WINDEV, iOS and Android configurations (and even WEBDEV configurations). In edit mode, you can seamlessly switch from one configuration to another. Remark: it is of course necessary to have a WINDEV Mobile (and/or WEBDEV) license.

**Benefit provided by this new feature of version 26:**  
It makes everything easier

## NEW IOS/ANDROID COMMON FEATURES

### 660 New feature WD WB WM NEW ANIMATIONS

- 3 new control animations are introduced in version 26:
- Button click: fade in, fade out: the button gradually goes from one state to the other.
  - Control appears/disappears: fade in, fade out.
  - Cell appears/disappears in Layout controls: controls go up or down gradually.

**Benefit provided by this new feature of version 26:**  
New animations in WINDEV Mobile!

### 661 New feature WD WB WM OCR ON MOBILE DEVICES: TAKE A PICTURE, RETRIEVE THE TEXT



Got a phone? Your app can take a picture of the contract and convert it to text

Applications developed with WINDEV Mobile 26 include Optical Character Recognition (OCR). This type of recognition can be used on any file (PDF, JPEG, etc.) and also on photos taken with the phone (or tablet). The user can take a picture of a contract and retrieve the text of the contract in the application! The phone can also be used as a scanner for a Windows application or a website: it takes a picture of a document and sends the text to a Windows application or a website.

**Benefit provided by this new feature of version 26:**  
An essential new feature

## 3 NEW SMART CONTROLS IN WINDEV MOBILE 26

### 655 New feature WD WB WM 3 NEW SMART CONTROLS IN WIN- DEV MOBILE 26

- New Smart controls are available in WINDEV Mobile 26.
- Snackbar
  - Unlock pattern
  - Bank-type PIN.

**Benefit provided by this new feature of version 26:**  
Create windows in less time



## 662 New feature WD WB WM NON-BLOCKING REQUIRED INPUT FIELD

The non-blocking required input field (see new feature 045) is also available for mobile devices. The icons and warning messages have been optimized for good readability on mobile devices.

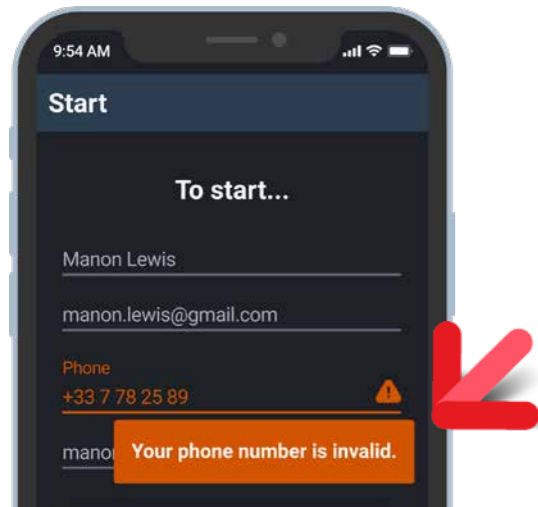
**Benefit provided by this new feature of version 26:**

*Who likes being stuck?*

## 663 New feature WD WB WM INVALID INPUT: CUSTOM ERROR MESSAGES

You can now choose how to indicate errors when the end user enters invalid or incomplete information:

- red borders
- text
- icon
- tooltip
- ...



*Example of input verification message*

**Benefit provided by this new feature of version 26:**

*So now we're clear!*

## 664 New feature WD WB WM GO: CHOOSE HARDWARE FOR TESTS (GO)

You can now choose the hardware that will be used for tests (via the GO option) during the development phase. This allows you to make sure that the window behaves as expected on specific devices: anchors, etc.

**Benefit provided by this new feature of version 26:**

*You're the one who chooses*

## 665 New feature WD WB WM LOOPER CONTROL: ROW HEIGHT GREATER THAN SCREEN HEIGHT

In a Looper control, the height of a row can now be greater than the height of the screen. Useful, for example, when a row contains a long message.

**Benefit provided by this new feature of version 26:**

*All texts are readable*

## 666 New feature WD WB WM SPEECH SYNTHESIS: VOICE SELECTION

The new `SpeechSynthesisListVoices` WLanguage function lists the different voices available on the device.

The `SpeechSynthesisInitialize` function is used to select a voice.

Thus, you can manage the voices used for the speech synthesis in your applications.



**Benefit provided by this new feature of version 26:**

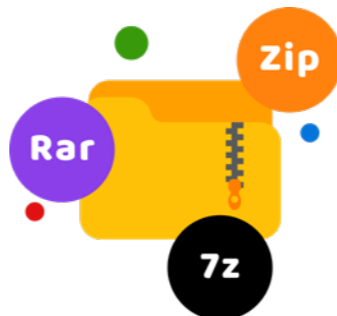
*You choose the voice*

## 667 New feature WD WB WM ZIP FUNCTIONS: ZIPARCHIVE TYPE AVAILABLE

The `zipArchive` WLanguage type, which allows you to handle compressed files (Zip, 7z, other) is now available for mobile devices.

**Benefit provided by this new feature of version 26:**

*Handle compressed files with ease*



## 668 New feature WD WB WM AUTO-SIZING TEXT: WHEN A CAPTION IS TOO LARGE, THE FONT IS REDUCED

You can assign captions by programming. The assigned caption may be larger than its container. And in some cases, you still want the entire text to be displayed.

An option in the 7-tab window allows you to specify that the entire text must be displayed.

If the text is too large, the font will be reduced so that it is completely visible.

You can set the minimum font size.

**Benefit provided by this new feature of version 26:**

*Information always visible*

## 669 New feature WD WB WM EDIT CONTROL: CUSTOM MASKS

Custom input masks are available in WINDEV Mobile 26.

`InputMask`, an advanced WLanguage type, allows you to program all the desired behaviors: license plate, product number, ...



**Benefit provided by this new feature of version 26:**

*Masks are kind of important right now*

## 670 New feature WD WB WM MAP CONTROL ON MOBILE

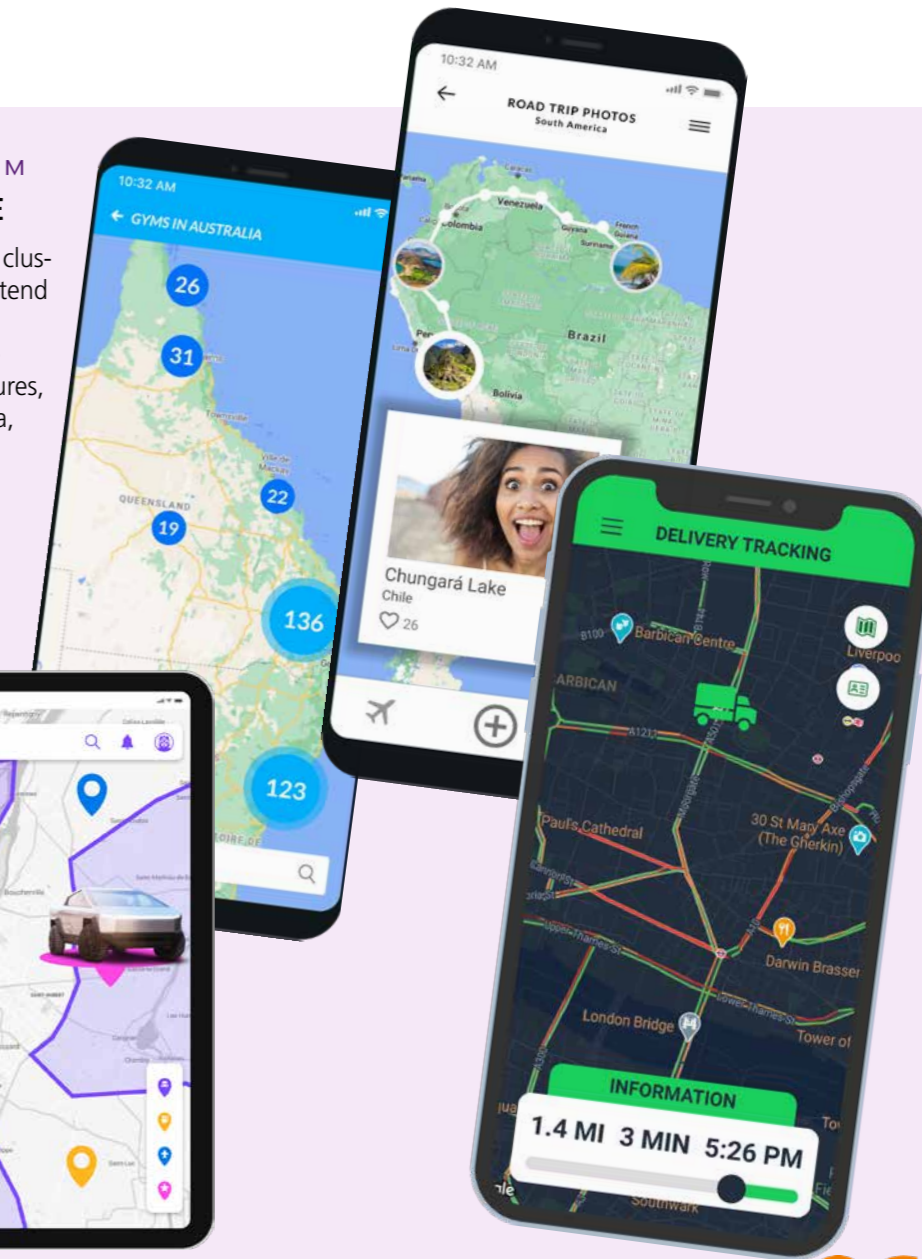
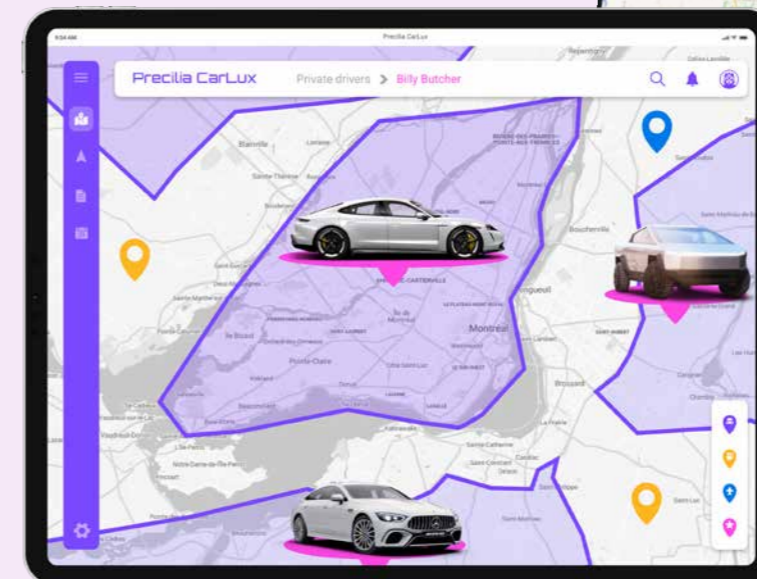
The Map control boasts significant improvements: cluster, Popup, route display, image drawing, etc ... extend the possibilities of this powerful control.

For mobile phones; the new dark theme, real-time road traffic display and the ability to manage gestures, or to restrict the display to a given geographic area, are especially useful additions.

See new features 022 to 031.

**Benefit provided by this new feature of version 26:**

*Powerful maps*





# YOU PRIVATE STORE

## ACCESS TO THE MDM SITE

## APPLICATION UPDATE AVAILABLE



### 671 New feature WD WB WM MDM SYSTEM AS STANDARD: YOU PRIVATE STORE

To distribute your applications, there are 2 possibilities:

- use a public store such as App Store or Google Play
- distribute your applications by yourself.

The distribution of professional applications via a public store raises a number of concerns. And the distribution of applications by a direct method is not feasible on a large scale because everything has to be done manually: copy to each device, updates, authorizations....

WINDEV Mobile 26 offers an ideal solution for distributing your professional applications: **WINDEV Mobile 26 features a ready-to-use Mobile Device Management system**, your private store!

### 672 New feature WD WB WM MDM FOR WINDEV MOBILE: EASY

It is very easy to deploy your applications:

1. Enable the MDM option in the project
2. Compile the applications
3. Upload the applications to the MDM server
4. Define the authorized users
5. Share the URL or QRCode (automatically generated) with the users
6. Users will download the app, log in and start using the app.
7. For subsequent updates; users will be notified, and can accept and automatically download the update.

*Note that in iOS, an In-House distribution provisioning profile is necessary.*

**Benefit provided by this new feature of version 26:**  
A powerful infrastructure

### 673 New feature WD WB WM MDM FOR WINDEV MOBILE: AUTHENTICATION

You can fully manage user logins and passwords:

- create an account
- validate account creation by email
- manage forgotten passwords
- change password
- delete or temporarily block an account
- ...

End users can receive their login credentials, or be authorized to create their account.

You can restrict the account creation process only to certain contacts: in that case, the administrator must specify the users' email addresses or domain names. Users are identified via the User Groupware, which allows you to set permissions.

**Benefit provided by this new feature of version 26:**  
Powerful user account management

### 674 New feature WD WB WM MDM FOR WINDEV MOBILE: APPLICATION UPDATES

You can fully manage your application updates: download over Wi-Fi only, minimum OS version required, notification on the device or message in the application, ...

**Benefit provided by this new feature of version 26:**  
Manage future updates

### 675 New feature WD WB WM MDM IN PCSCLOUD

Pcscloud.net offers a special bundle to use an MDM server without having to worry about infrastructure and administration: you only define usage levels.

**Benefit provided by this new feature of version 26:**  
Host your apps without constraints



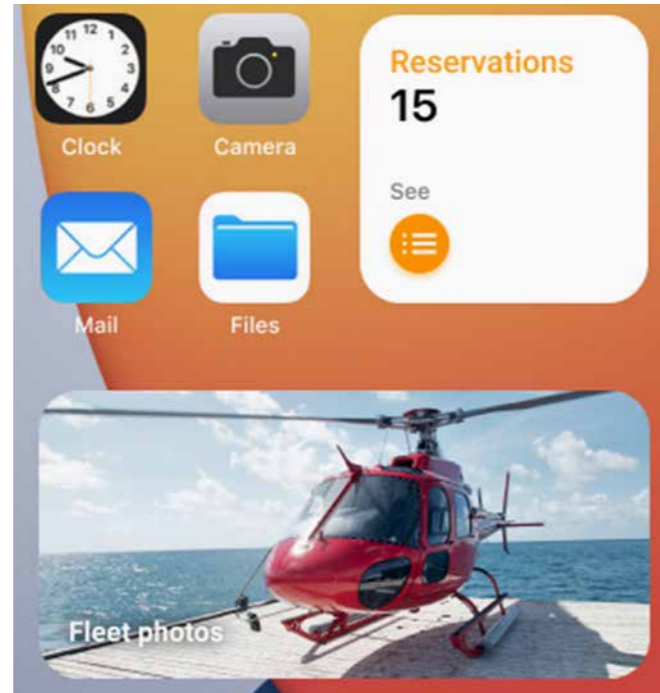
# AND FOR IOS

## 676 New feature WD WB WM COMMON NEW FEATURES FOR MOBILE



Development for iOS has never been as powerful as with WINDEV Mobile 26. You benefit from powerful new features that come in addition to all the existing ones. iOS evolves, and so does WINDEV Mobile 26. WINDEV Mobile 26 for iOS benefits from the general common features of version 26, **plus** new features common to mobile devices: Smart controls, OCR, animations, non-blocking input, hardware selection for tests, auto-sizing text, Map control, ... And **in addition to** the general common new features, **in addition to** the common new features specific to mobile devices, version 26 offers the following new features especially for iOS.

## 677 New feature WD WB WM IOS 14, NEW IPHONE

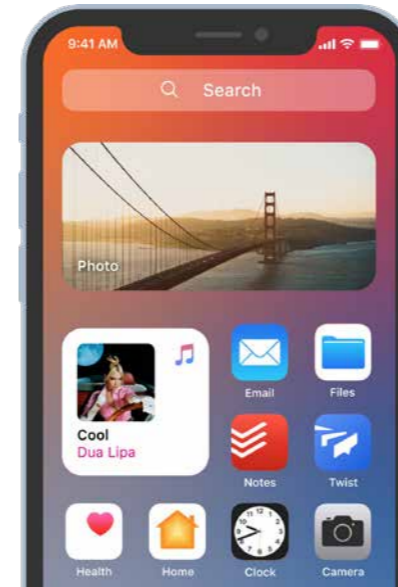


"The" new feature in iOS 14: Widgets

WINDEV Mobile 26 supports the new iOS 14. Note that iOS 14 requires at least an iPhone 6S to run. 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 26:** Enjoy all the features of iOS version 14

## 679 New feature WD WB WM IOS 14: HOME SCREEN WIDGET

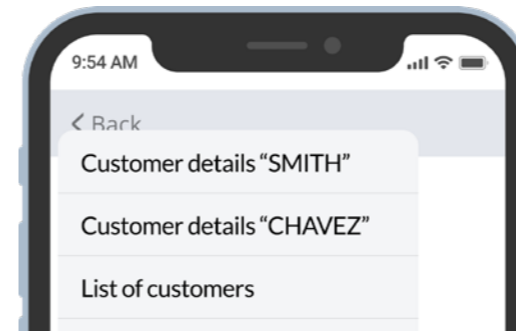
iOS14 allows you to use Widgets on the iPhone and iPad Home Screen. 3 widget sizes are proposed by Apple. WINDEV Mobile 26 allows you to create and manage these 3 types of Widgets.



**Benefit provided by this new feature of version 26:** Widget support

## 680 New feature WD WB WM IOS 14: BACK BUTTON & NAVIGATION MENU

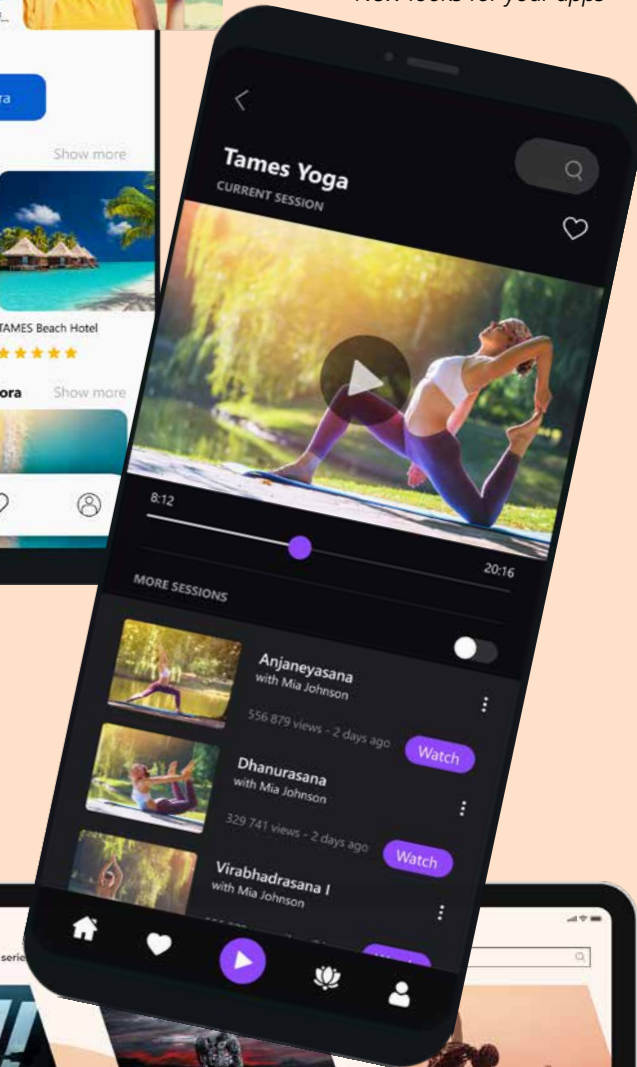
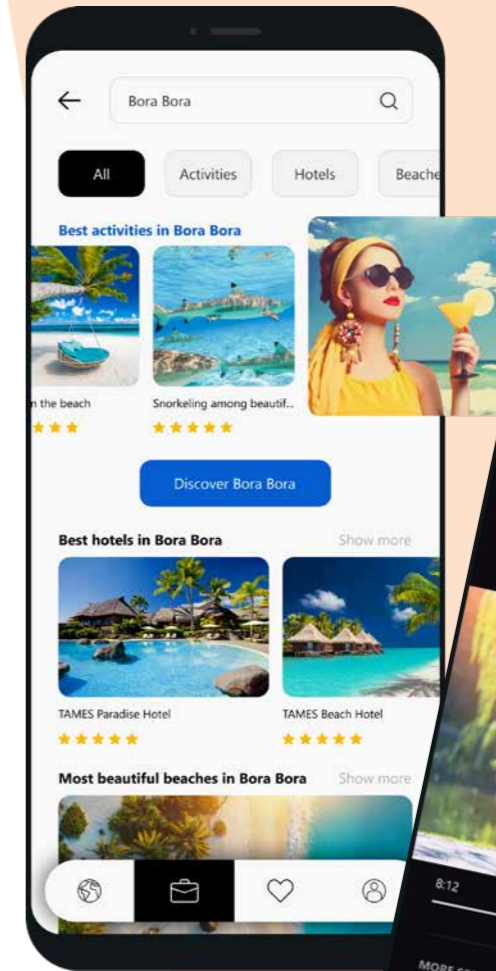
In iOS 14, a long press on the Back button opens the navigation history, and allows the user to return to previous windows. In version 26, you don't have to write any particular code to benefit from this feature.



**Benefit provided by this new feature of version 26:** Navigation history support

## 681 New feature WD WB WM 2 NEW SKIN TEMPLATES FOR MOBILE

WINDEV Mobile 26 includes the Suki and Winki skin templates: use them as you like to customize your apps! **Benefit provided by this new feature:** New looks for your apps



# TRANSFORM YOUR WINDEV APPLICATIONS INTO IOS & ANDROID APPS: EASIER AND EASIER

## 678 New feature WD WB WM TRANSITION TO MOBILE DEVICES MADE EASIER

Transforming your existing WINDEV applications (or parts of applications) into iOS and Android applications is easier than ever before. The new environment with split view (see new feature 065) allows you to edit a Desktop window and a Mobile window at the same time, which makes everything easier. The conversion wizard has been improved and is even more precise. **Benefit provided by this new feature of version 26:** Easily transform your WINDEV applications into mobile applications





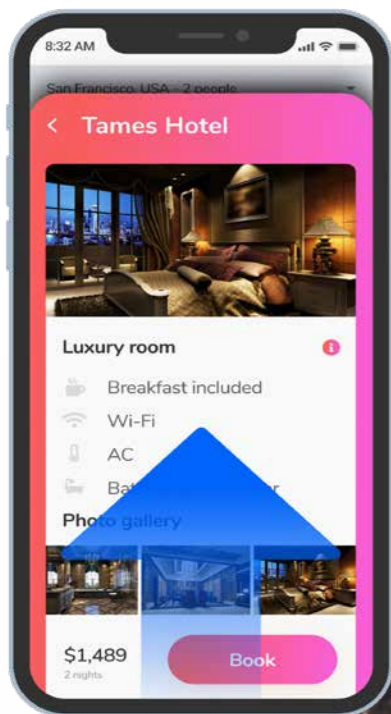
## 682 New feature WD WB WM RUN WINDEV MOBILE 26 APPLICATIONS ON MACS WITH ARM PROCESSORS

WINDEV Mobile 26 allows you to create applications to be run on Mac, using the Mac Catalyst platform. Macs with X86 and SILICON (ARM) processors are supported.

**Benefit provided by this new feature of version 26:**  
WINDEV Mobile 26 supports all processors

## 683 New feature WD WB WM OPEN APPS FROM THE BOTTOM OF THE SCREEN

In version 26, an option in the 7-tab window now allows opening apps from the bottom of the screen ("Sheet" mode). In this case, the app will remain in a "cascading" view: it doesn't completely cover the window underneath.



**Benefit provided by this new feature of version 26:**  
Why not?

## 684 New feature WD WB WM APPLE WATCH SERIES 6 AND SE

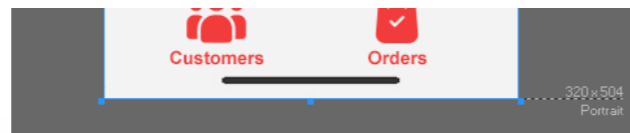


Both the Apple Watch Series 6 and SE are supported. 103 new WLanguage functions are available for Apple Watch. See new feature 691.

**Benefit provided by this new feature of version 26:**  
WINDEV Mobile 26 is right on time!

## 685 New feature WD WB WM VIEW THE HOME BAR (IPHONE X AND ABOVE)

Starting with the iPhone X, a horizontal Home bar is displayed at the bottom of the screen (there is no longer a physical Home button). This bar can now be viewed in the window editor and in the simulator.



iPhone Home Bar

**Benefit provided by this new feature of version 26:**  
It's always good to know where the bar is

## 686 New feature WD WB WM WRITE NFC

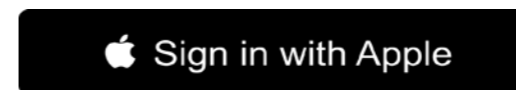
WINDEV Mobile 26 allows writing NFC tags with iOS devices. For example, this allows iPhones to write to NFC tags.

**Benefit provided by this new feature of version 26:**  
Take advantage of this mainstream technology



## 687 New feature WD WB WM GPU (USER GROUPWARE): NOW SUPPORTS "SIGN IN WITH APPLE"

You can now sign in to the User Groupware using "Sign in with Apple". There is nothing to code. Everything is automatic, once authorized by the GPU administrator (in the administration site)!



**Benefit provided by this new feature of version 26:**  
Standard authentication

## 688 New feature WD WB WM 11 NEW TYPES

11 new types of variables are available for iOS:

|             |             |                 |             |
|-------------|-------------|-----------------|-------------|
| MapCircle   | MapImage    | MapPolygone     | MapPolyline |
| InfoVersion | MarkerImage | ocrTextBlock    | ocrOption   |
| Polygon     | zipArchive  | zipArchivedFile |             |

**Benefit provided by this new feature of version 26:**  
More and more power for WLanguage

## 689 New feature WD WB WM 8 NEW PROPERTIES

8 new properties for iOS are available in WLanguage

|            |               |                     |              |
|------------|---------------|---------------------|--------------|
| Tilt       | RotationAngle | WithTilt            | WithRotation |
| WithScroll | Compass       | InternalWindowPopup | TrafficInfo  |

**Benefit provided by this new feature of version 26:**  
More and more power for WLanguage

## 690 New feature WD WB WM 61 NEW WLANGUAGE FUNCTIONS FOR IOS

WLanguage is enriched with 61 new functions for iOS, as well as 33 new functions for iOS Widgets (see full list on our website).

|                       |  |                                     |                                  |
|-----------------------|--|-------------------------------------|----------------------------------|
| AJAXCallInProgress    | AppChangeParameter                     | AppInstallUPD                       | AppVersionInfo                   |
| AppListVersion        | AppUPDAvailable                        | AppParameter                        | BufferToPhrase                   |
| CarteDisplayPopup     | MapDisplayArea                         | MapAddShape                         | MapAddImage                      |
| MapClosePopup         | MapLimitArea                           | MapModifyShape                      | MapModifyImage                   |
| MapPopupDisplayed     | MapDeleteShape                         | MapDeleteImage                      | DateTimeToString                 |
| LastDayOfYear         | TwoFactorAuthenticationGenerateTOTPKey | TwoFactorAuthenticationGenerateLink | TwoFactorAuthenticationCheckCode |
| InWebSocketServerMode | InWebSocketServerGlobalServiceMode     | ErrorReset                          | fnInsertTextAtBeginning          |
| GenerateLorem         | geoGetArea                             | GPSStopDetection                    | GPSDetectPosition                |
| gpwPageURL            | HJSONToRecord                          | HSuggestKey                         | HSuggestKeyStart                 |
| HSuggestKeyEnd        | HTransactionInProgress                 | HTriggerRecordBefore                | PDFReaderInfoXY                  |
| MaskZipCode           | MaskFormat                             | MaskPhoneNumber                     | NFCWriteTag                      |
| OCRAddLanguage        | OCRDetectTextArea                      | OCRExtractTextBlock                 | OCRExtractText                   |
| OCRParameter          | OCRDeleteAllLanguages                  | PhraseToBuffer                      | InvalidInputShowTooltip          |
| InvalidInputShowIcon  | SpeechSynthesisListVoicesArrayDistinct |                                     | ArrayIntersect                   |
| ArrayUnion            | ArrayUnionAll                          | ToastDisplayW                       | zipExtractDirectory              |
| zipFilter             |  |                                     |                                  |

## 691 New feature WD WB WM 103 NEW WLANGUAGE FUNCTIONS FOR APPLE WATCH

103 new WLanguage functions are available for Apple Watch.

|                                    |                      |                        |                              |
|------------------------------------|----------------------|------------------------|------------------------------|
| Age                                | LeapYear             | CurrentYear            | AJAXCallInProgress           |
| BufferToInteger                    | BufferToHexa         | BufferToPhrase         | BufferToReal                 |
| StringToDate                       | StringToDuration     | StringToTime           | DateDifference               |
| Today                              | DateTimeDifference   | DateTimeLocalToUTC     | SysDateTime                  |
| DateTimeUTCToLocal                 | DateTimeValid        | DateTimeToString       | DateTimeToEpoch              |
| DateTimeToReal                     | DateValid            | DateToString           | DateToInteger                |
| DateToDay                          | DateToDayOfWeek      | DateToDayInAlpha       | DateToMonthInAlpha           |
| DateToWeekNumber                   | DecimalToSexagesimal | Tomorrow               | LastDayOfYear                |
| LastDayOfWeek                      | LastDayOfMonth       | DurationToString       | InWebSocketServerMode        |
| InWebSocketServerGlobalServiceMode | IntegerToDate        | IntegerToTime          | IntToHexa                    |
| IntegerToDay                       | IntegerToDayInAlpha  | IntegerToMonthInAlpha  | IntegerToWeekNumber          |
| EpochToDateTime                    | ErrorReset           | IsOdd                  | IsNumeric                    |
| IsEven                             | Random               | TimeDifference         | TimeValid                    |
| TimeToString                       | TimeToInteger        | HexaToBuffer           | HexaToInt                    |
| Yesterday                          | InitRandom           | Now                    | Max                          |
| MemAdd                             | MemCreate            | MemLast                | MemCurrent                   |
| MemOut                             | MemExist             | MemModify              | MemCount                     |
| MemSetPosition                     | MemPrevious          | MemFirst               | MemSeek                      |
| MemRetrieve                        | MemNext              | MemDelete              | MemDeleteAll                 |
| MemSort                            | MemFound             | MemKeyVal              | Min                          |
| CurrentMonth                       | NumberInWords        | NumToString            | NumToFinancialWritingChinese |
| DayNumberInAlpha                   | MonthNumberInAlpha   | WeekNumber             | Easter                       |
| PhraseToBuffer                     | FirstDayOfYear       | FirstDayOfWeek         | FirstDayOfMonth              |
| RealToDateTime                     | sComputeCrc16        | sComputeCrc32          | WeekToDate                   |
| SexagesimalToDecimal               | ArrayDistinct        | ArrayIntersect         | ArrayUnion                   |
| ArrayUnionAll                      | LengthToString       | MatchRegularExpression |                              |





## 692 New feature WD WB WM COMMON NEW FEATURES FOR MOBILE



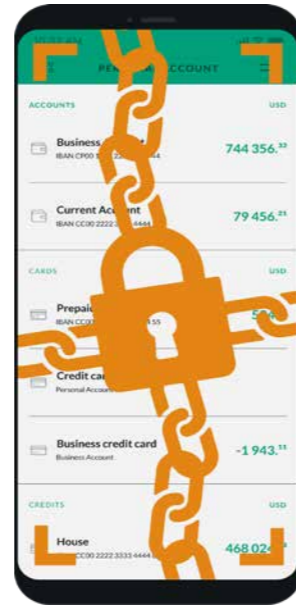
Development for Android has never been as powerful as with WINDEV Mobile 26.

You benefit from powerful new features that come in addition to all the existing ones: Smart controls, OCR, animations, non-blocking required input fields, hardware selection for tests, auto-sizing text, Map control, etc.

Android evolves, and so does WINDEV Mobile 26, most notably with its support for **Android 11**.

WINDEV Mobile 26 for Android benefits from the common new features of version 26, **plus** mobile-specific new features, **plus** Android-specific new features.

## 693 New feature WD WB WM DISABLE SCREENSHOTS



Version 26 allows you to prevent the user from taking screenshots.

This is a useful feature for applications that contain sensitive data, such as banking applications.

A new option in the 7-tab window allows you to disable screenshots.

The new `..ScreenshotAllowed=False` property allows you to disable screenshots by programming, if necessary.

**Benefit provided by this new feature of version 26:**  
*Confidentiality guaranteed*

## 694 New feature WD WB WM NEW TREND IN ACTIONS BARS: 56 PIXELS INSTEAD OF 48 (AND THAT CHANGES EVERYTHING!)

In Android, the Action Bar have 2 heights: 48 pixels or 56 pixels.

In version 26, you can choose the height of the action bar. The current trend is to use Action Bars with a height of 56 pixels...

**Benefit provided by this new feature of version 26:**  
*Choose your favorite look!*



56-pixel-high Action Bar



48-pixel-high Action Bar

# ANDROID: MOBILE CONTROL CENTER

## 695 New feature WD WB WM PHONE (AND TABLET) CONTROL CENTER

Do you know in which phone directory the log files of your application are located?

Do you know how to record a video of a running app on your phone?...

The Android Control Center helps you with these tasks, and much more.

**Benefit provided by this new feature of version 26:**  
*A new Control Center*

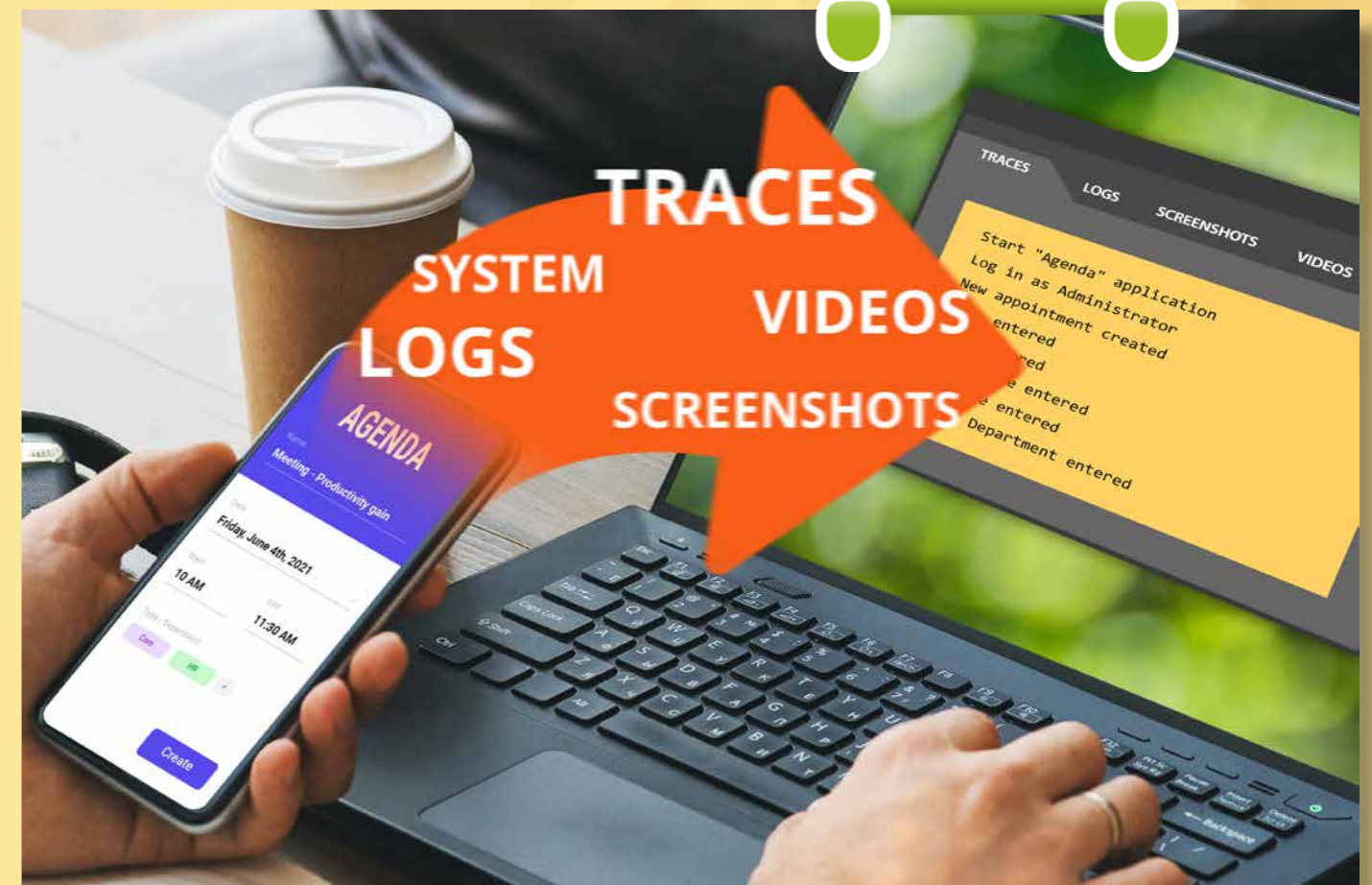
## 696 New feature WD WB WM MOBILE CONTROL CENTER: USEFUL FEATURES

The Android Control Center allows you to easily manage your Android devices during the development phase.

These are some of the functionalities you will find in the Android Control Center:

- View general information of the device: version, resolution, density, dpi, processor, etc.
- View system logs (logcat)
- View the debug trace for WINDEV Mobile applications: trace, assert, error
- Screenshot
- Record videos of running apps
- Manage applications in the device: list, search, app info, install, uninstall, switch to device owner mode
- Intuitive and responsive file explorer
- ...

**Benefit provided by this new feature of version 26:**  
*Access and fine-tune mobile devices from the PC*





## 697 New feature WD WB WM JAVA: INCORPORATE JAVA CLASSES INTO YOUR PROJECT

You may need a Java class in a WINDEV Mobile Android project, for example to manage an SDK. In WINDEV Mobile 26, one or more Java classes can be incorporated directly into the project.

Reminder: it was already possible to write Java code directly in the WINDEV Mobile code editor. This new feature incorporates a whole class into the project, which significantly simplifies this operation.

**Benefit provided by this new feature of version 26:**

*Now, that's classy*

## 698 New feature WD WB WM JAVA: DIRECTLY CALL WLANGUAGE PROCEDURES

In version 26, you can easily call WLanguage procedures from Java code.

Simply add the `<java>` attribute to the corresponding procedure.

You can then call this WLanguage procedure by its name directly from the Java code.

```
PROCEDURE UpdateForm() <Java>
```

**Benefit provided by this new feature of version 26:**

*Practicality*

## 699 New feature WD WB WM HASHING: 8 NEW HASH TYPES AVAILABLE FOR ANDROID

SHA-1 and MD5 hash types were already supported.

In version 26, the following types are also available for Android:

- DJB2 (Bernstein)
- MD4

- MURMUR
- RIPEMD
- SHA-3
- TIGER
- WHIRLPOOL
- CKSUM

**Benefit provided by this new feature of version 26:**

*New hash types*



## 700 New feature WD WB WM WLANGUAGE: COMPARE STRINGS IN ANDROID

All string comparison operators are now available for Android.

New operators supported:

- Very flexible equality: `~~`
- Starts with flexible `[~`
- Starts with very flexible `[~~`
- Ends with `=]`
- Ends with flexible `~]`
- Ends with very flexible `~~]`
- Contains `[=]`
- Contains flexible `[~]`
- Contains very flexible `[~~]`

**Benefit provided by this new feature of version 26:**

*Compare easily*

## 701 New feature WD WB WM OVERLOADED PROCEDURES

A procedure can have different syntaxes: different number and type of parameters.

This type of procedure is now supported for Android.

**Benefit provided by this new feature of version 26:**

*Power*



## 702 New feature WD WB WM COMPONENTS FOR ZEBRA DEVICES

WINDEV Mobile 26 integrates two new components for Zebra industrial devices.

The RFID component allows you to control RFID readers from your applications.

The MX (Mobility Extensions) component allows access to additional Android functionalities: control of device settings and installed applications, Wi-Fi configuration, ...

**Benefit provided by this new feature of version 26:**

*Programming made even easier*



## 703 New feature WD WB WM TYPE INFERENCE

In version 26, type inference is supported for Android. Code is more concise and easier to write.

**Benefit provided by this new feature of version 26:**

*Easy cross-platform development*

## 704 New feature WD WB WM THREAD IN THE BACKGROUND: DISABLE BATTERY OPTIMIZATION

The latest versions of Android optimize battery consumption by preventing applications from running in the background. This may be inconvenient.

In version 26, the new `SysBatteryOptimBackground` function allows you to disable battery optimization in order to keep the application running in the background. Android will simply request end-user confirmation.

**Benefit provided by this new feature of version 26:**

*Save the threads!*

## 705 New feature WD WB WM MVP, 3 NEW ATTRIBUTES: MAPPING, ASSOCIATED, PRESENTER

In MVP, the `Mapping`, `Associated` and `Presenter` attributes are now available for Android.

All MVP attributes are now cross-platform!

**Benefit provided by this new feature of version 26:**

*Methods!*

## 706 New feature WD WB WM TOAST TYPE AVAILABLE IN ANDROID

The `Toast` type is now available for Android.

For example, it allows you to create "Snackbars" (toasts messages with a button).

**Benefit provided by this new feature of version 26:**

*More possibilities*

## 707 New feature WD WB WM DEBUGGER AVAILABLE ON THE GOOGLE EMULATOR (AND OTHERS)

In version 26, you can debug the code of your projects using the emulator provided by Google. This makes it easier to perform tests on different devices.

**Benefit provided by this new feature of version 26:**

*Emulate!*



## 708 New feature WD WB WM MISCELLANEOUS

• The `HTrack` function is available for Android. This function notifies the application when a change is made to the database.

• `JSON` functions in HFSQL are available for Android: `HImportJSON`, ...

**Benefit provided by this new feature of version 26:**

*Easy programming*



## 709 New feature WD WB WM WLANGUAGE 12 NEW TYPES

12 new types of variables are available for Android:

|             |             |             |                 |
|-------------|-------------|-------------|-----------------|
| MapCircle   | MapImage    | MapPolygone | MapPolyline     |
| InfoVersion | MarkerImage | InputMask   | ocrTextBlock    |
| ocrOption   | Polygon     | zipArchive  | zipArchivedFile |

**Benefit provided by this new feature of version 26:**

*Very useful types*

## 710 New feature WD WB WM 16 NEW PROPERTIES

16 new WLanguage functions are available for Android

|                     |                 |              |                   |
|---------------------|-----------------|--------------|-------------------|
| Tilt                | BearingWithTilt | WithRotation |                   |
| WithScroll          | ToolbarVisible  | Compass      | ScreenshotAllowed |
| InternalWindowPopup | Grayed          | TrafficInfo  | FontMinSize       |

**Benefit provided by this new feature of version 26:**

*More and more power for WLanguage*

## 711 New feature WD WB WM 56 NEW WLANGUAGE FUNCTIONS FOR ANDROID

In version 26, WLanguage is enriched with 56 new functions for Android, as well as 33 new functions for Android Widgets (see full list on our website).

|                           |                           |                                    |                       |
|---------------------------|---------------------------|------------------------------------|-----------------------|
| AppChangeParameter        | AppInstallUPD             | AppVersionInfo                     | AppListView           |
| AppParameter              | CarteDisplayPopup         | MapDisplayArea                     | MapAddShape           |
| MapAddImage               | MapChangeStyle            | MapClosePopup                      | MapLimitArea          |
| MapModifyShape            | MapModifyImage            | MapPopupDisplayed                  | MapGetStyle           |
| MapDeleteShape            | MapDeleteImage            | ControlNext                        | EncryptGenerateRSAKey |
| DateTimeToString          | InWebSocketServerMode     | InWebSocketServerGlobalServiceMode | geoGetArea            |
| gpwPageURL                | HRecordToJSON             | HExport                            | HImportJSON           |
| HJSONToRecord             | HTrack HTrackStop         | MaskZipCode                        |                       |
| MaskFormat                | MaskPhoneNumber           | OCRLoadLanguage                    | OCRDetectTextArea     |
| OCRExtractTextBlock       | OCRExtractText            | OCRParameter                       | OCRModelPathDirectory |
| OCRDeleteAllLanguages     | HTMLEditorFormatSelection | HTMLEditorInsert                   | HTMLEditorSelect      |
| SpeechSynthesisListVoices | SysOptimBattery           | ToastDisplayW                      | zipSplit              |
| zipIsMulti                | zipExtractDirectory       | zipFilter                          | zipPassword           |
| zipNbPart                 | zipNbPartNeeded           | zipOpenRAR                         | zipMerge              |



## 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). When you migrate your industrial devices from CE to Android, you don't lose your code! All thanks to WINDEV Mobile!**

Your teams will appreciate keeping their know-how!

### 712 New feature WD WB WM COMMON NEW FEATURES

WINDEV Mobile 26 for Windows CE, Mobile and Windows Embedded benefit from the common new features of the environment in version 26.

**Benefit provided by this new feature of version 26:**  
New features even for Windows CE!

### 713 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 26.

|                       |                                    |                      |                     |
|-----------------------|------------------------------------|----------------------|---------------------|
| AJAXCallInProgress    | AppVersionInfo                     | CarteDisplayPopup    | MapDisplayArea      |
| MapAddShape           | MapAddImage                        | MapChangeStyle       | MapClosePopup       |
| MapLimitArea          | MapModifyShape                     | MapModifyImage       | MapPopupDisplayed   |
| MapGetStyle           | MapDeleteShape                     | MapDeleteImage       | DateTimeToString    |
| InWebSocketServerMode | InWebSocketServerGlobalServiceMode | ErrorReset           | HSuggestKey         |
| HSuggestKeyStart      | HSuggestKeyEnd                     | HTriggerRecordBefore | ArrayDistinct       |
| ArrayIntersect        | ArrayUnion                         | ArrayUnionAll        | WebSocketDisconnect |
| WebSocketSend         | WebSocketRun                       | WebSocketListUser    | zipExtractDirectory |
| zipFilter             |                                    |                      |                     |

## UWP

### 714 New feature WD WB WM COMMON NEW FEATURES

UWP development benefits from most of the common new features of version 26.

**Benefit provided by this new feature of version 26:**  
UWP evolves

### 715 New feature WD WB WM NEW ENVIRONMENT

UWP development also benefits from the new development environment of version 26.

**Benefit provided by this new feature of version 26:**  
Increased user friendliness

### 716 New feature WD WB WM 22 NEW WLANGUAGE FUNCTIONS FOR UWP

22 new WLanguage functions are introduced for UWP.

|                       |                                    |                      |                         |
|-----------------------|------------------------------------|----------------------|-------------------------|
| AJAXCallInProgress    | BufferToPhrase                     | DateTimeToString     | LastDayOfYear           |
| InWebSocketServerMode | InWebSocketServerGlobalServiceMode | ErrorReset           | fnInsertTextAtBeginning |
| GenerateLorem         | HJSONToRecord                      | HSuggestKey          | HSuggestKeyStart        |
| HSuggestKeyEnd        | HTransactionInProgress             | HTriggerRecordBefore | PhraseToBuffer          |
| ArrayDistinct         | ArrayIntersect                     | ArrayUnion           | ArrayUnionAll           |
| zipExtractDirectory   | zipFilter                          |                      |                         |



### 717 New feature WD WB WM WEBDEV 26: BENEFIT FROM THE 170 NEW FEATURES OF VERSION 26



WEBDEV 26 benefits from most of the 170 common new features in version 26. WEBDEV 26 most notably benefits from the new Smart controls, HTML programming, new environment, new Map control, simplified style sheets, asynchronous HFSQL queries... And in addition to all these new features, WEBDEV 26 benefits from new features specific to the Web to be discovered in the following pages.

**Benefit provided by this new feature of version 26:**  
An incredible amount of new features

## NEW SMART CONTROLS

### 718 to 721 New feature WD WB WM 4 BUSINESS CONTROLS FOR WEBDEV

4 new Smart controls are available in WEBDEV 26:

- Password creation help
- Google reCaptcha
- Bank-type PIN code input
- Context menu button.

**Benefit provided by this new feature of version 26:**  
Massive time savings



WITH WINDEV MOBILE, EVERYTHING IS UNDER CONTROL



## 722 New feature WD WB WM NEW SMART CONTROL PASSWORD CREATION HELP

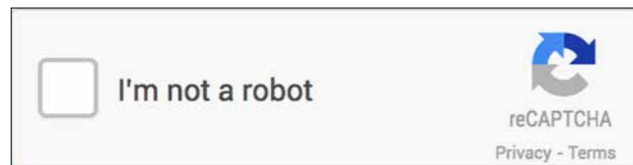
The "Password creation help" Smart control displays the list of criteria that the password must meet, and indicates which criteria have not been met. See new feature 177.

**Benefit provided by this new feature of version 26:**

Web users will love this feature

## 723 New feature WD WB WM NEW SMART CONTROL GOOGLE RECAPTCHA

The "Google Captcha" Smart control allows you to integrate a Google reCaptcha with ease. Captchas are used to prevent spam robots from using a website: denial of service, brute-force attacks, or simple data mining...



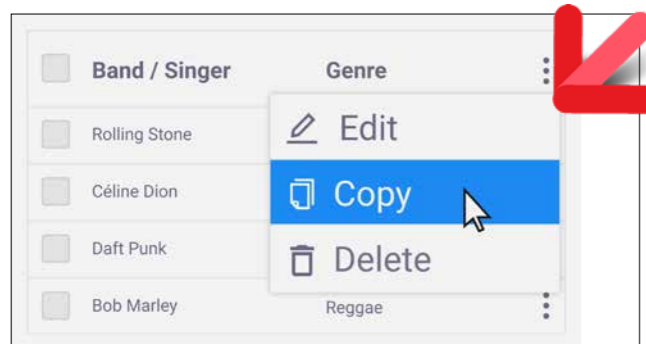
The well-known Google reCAPTCHA

**Benefit provided by this new feature of version 26:**

A well-known captcha in your websites

## 724 New feature WD WB WM NEW SMART CONTROL CONTEXT MENU BUTTON

The "Context Menu Button" Smart control (three vertical dots) opens a ready-to-use context menu. Clicking on the button expands a popup menu.



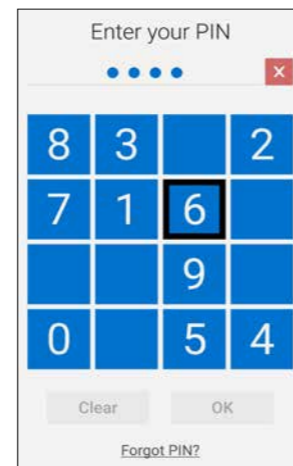
Ready-to-use context menu

**Benefit provided by this new feature of version 26:**

Create context menus without effort

## 725 New feature WD WB WM NEW SMART CONTROL PIN CODE INPUT

The "PIN code input" Smart control is available in WEBDEV. Numbers are automatically displayed in random order.



Standard, modern code input

**Benefit provided by this new feature of version 26:**

Standard PIN code input

## NEW IMAGE EDITOR CONTROL IN YOUR WEBSITES

## 726 New feature WD WB WM AN IMAGE EDITOR IN YOUR WEBSITES

By using the new Image Editor control in your websites, you will allow users to create and edit images or photos. The control, icon bars and available actions have been designed for use on mobile devices as well!

**Benefit provided by this new feature of version 26:**

The users of your websites can edit their own images

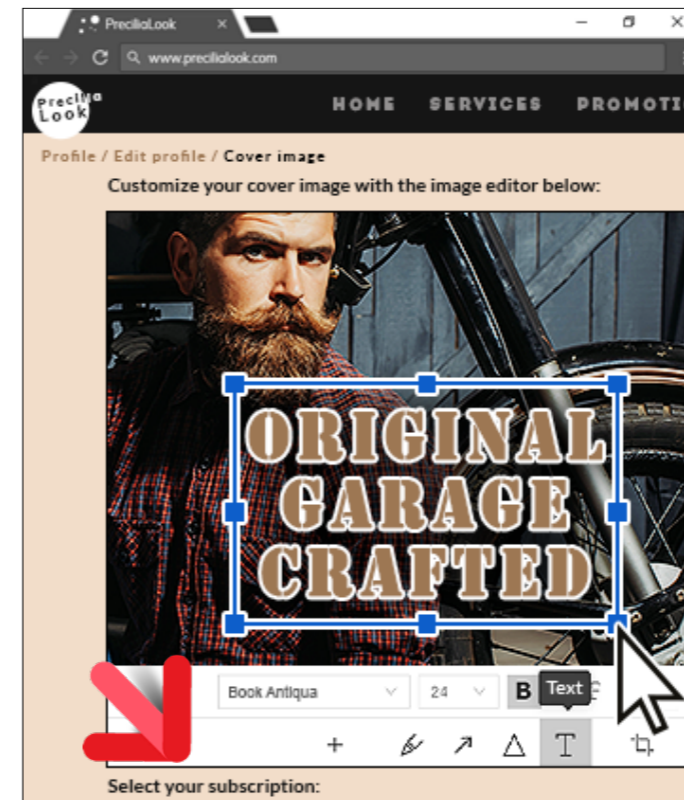
## 727 New feature WD WB WM IMAGE EDITOR CONTROL: THE FEATURES YOUR USERS EXPECT

The features of the new Image Editor control respond to the needs of Web users:

- alignment
- resizing
- rotation
- contrast/lightness
- text insertion
- line, arrow
- brush
- basic shapes: circle, rectangle...
- ...

Users can paste an image in the control, or select a file from

the disk. They will then be able to save changes.



Menu of the Image Editor control

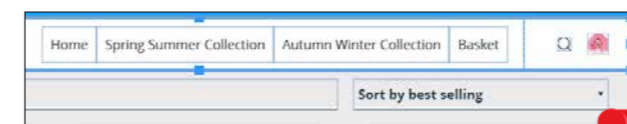
**Benefit provided by this new feature of version 26:**

Rich control

## NEW FEATURES OF CONTROLS

## 728 New feature WD WB WM NAVIGATION BAR CONTROL: ALSO AVAILABLE IN STANDARD MODE (ZONING)

In earlier versions of WEBDEV, the Navigation Bar control was only available in Responsive Web Design mode (RWD). In version 26, this control is available in standard mode (Zoning) and is therefore also available in the Layouts. In Layout mode, you can define how the bar will be displayed (expanded or collapsed) in each layout.



The navigation bar

**Benefit provided by this new feature of version 26:**

Customize your bars

## 729 New feature WD WB WM STATIC CONTROL: AUTOMATIC ELLIPSIS



An ellipsis is automatically inserted at the end

The Static control in WEBDEV 26 now uses an ellipsis: the text is truncated if it overflows the control, and an ellipsis automatically appears at the end.

**Benefit provided by this new feature of version 26:**

One more standard feature

## 730 New feature WD WB WM CHECK BOX CONTROL: CSS STYLE



3 examples of Check Box styles

Check Box controls now support CSS styles. There are many more styling possibilities.

**Benefit provided by this new feature of version 26:**

Beautiful controls? Check!

## 731 New feature WD WB WM LAYOUT CONTROL: MINIMUM HEIGHT PER CELL

Reminder: The Layout control adapts the page layout in real time, automatically removing any "gaps" created after a control is removed.

The size of a cell in a Layout control varies according to its content. With a small content, cells would become too small. The Layout control now allows you to set a minimum cell height: this is useful for clean layouts.

**Benefit provided by this new feature of version 26:**

Better UI



**732** New feature WD WB WM  
**IMAGE CONTROL:  
 WEBP FORMAT SUPPORTED**



The Image control already supports standard formats: JPG, GIF, PCD, PCX, PNG, PSD, TGA, TIF, BMP, EMF, WMF, ICO, ICW, CUR, PDF, SVG, WDPIC...  
 In version 26, the WEBP format, mainly used for the Web, is also supported.

**Benefit provided by this new feature of version 26:**  
*One more standard!*

**733** New feature WD WB WM  
**CELL CONTROL:  
 PROCEDURE LOCAL TO THE CELL**

The Cell control can now contain local (Server or Browser) procedures.  
 The scope of these procedures is limited to the cell.  
 This makes it possible to better encapsulate the processes of this cell, rather than defining them at the page level.  
 See also global variables and procedures in new features 105 to 108.

**Benefit provided by this new feature of version 26:**  
*Better organized code*

## SIMPLIFIED OPERATING MODES IN THE EDITOR

In version 26, 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 and allows you to easily integrate new members into the team.

**734** New feature WD WB WM  
**PRACTICAL FONT SIZE INPUT**

A small, but essential new feature: It is now possible to enter a font size and unit in the same control.  
 You no longer need to enter the size, change to another control and then enter the unit.

**Benefit provided by this new feature of version 26:**  
*Fewer operations*

**735** New feature WD WB WM  
**EASILY VIEW  
 AND SELECT SKINS**

In version 26, the thumbnails in the skin selection window accurately represent how the skin will look when used with the controls.  
 You will get a better idea of the result of the selected skin.



*See what your page will look like*

**Benefit provided by this new feature of version 26:**  
*Choose more easily*

**736** New feature WD WB WM  
**PAGE SETTINGS ON MOBILE:  
 NEW USER FRIENDLY UI**

The page settings UI for mobile has been revised: it's much more intuitive, and that changes everything!

**Benefit provided by this new feature of version 26:**  
*Easier editing*

**737** New feature WD WB WM  
**STYLE EDITING:  
 REAL-TIME PREVIEW**

When you modify a control style in the 7-tab window, these changes are displayed directly in the page.

**Benefit provided by this new feature of version 26:**  
*See the results immediately*

**738** New feature WD WB WM  
**CSS STYLE EDITING:  
 PASTE CSS BLOCKS**

You can now paste CSS blocks in a single operation when editing CSS styles:

- CSS elements are automatically transformed into properties suited for 7-tab windows.
- elements for which there is no property in the 7-tab windows are also taken into account and automatically inserted in the "custom input" section.

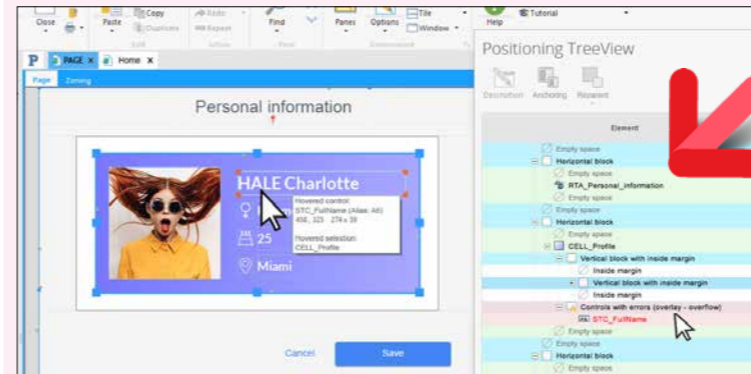
**Benefit provided by this new feature of version 26:**  
*Many operations saved per style*

# PAGE EDITOR UNDERSTAND CONTROL POSITIONING: VISIBLE LAYOUT BOXES

**739** New feature WD WB WM  
**STANDARD MODE (ZONING):  
 POSITIONING TREEVIEW**

In version 26, you can view the positioning tree of the controls in a page. This TreeView allows you to understand how the browser will position the controls.

*Positioning TreeView*



**Benefit provided by this new feature of version 26:**  
*Understand the positioning hierarchy*

**740** New feature WD WB WM  
**STANDARD MODE (ZONING):  
 HOVERING OVER A CONTROL  
 SHOWS THE LAYOUT BOX THAT CONTAINS IT**

WEBDEV uses virtual layout boxes to automatically manage the positioning of each control or group of controls.  
 At runtime, layout boxes "push" the other controls/boxes. WEBDEV 26 allows you to view these virtual layout boxes in the editor ... and makes everything clear!

For example, when you resize a control, you can see the implications this may have on the positioning of other controls in the page. This will allow you to better understand the shifts that can occur when a control is moved or resized by a single pixel!

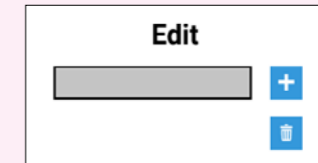
If a layout box is not positioned the way you want, simply create and position a cell and place the desired controls in it.

**Benefit provided by this new feature of version 26:**  
*Understand the positioning hierarchy*

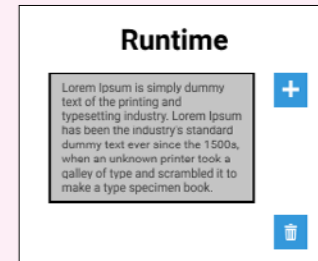
**741** New feature WD WB WM  
**EXAMPLE OF POSITIONING  
 DEFINED WITH LAYOUT BOXES**

The example illustrates a problem that occurs from time to time: at runtime, a control appears at an unexpected position.

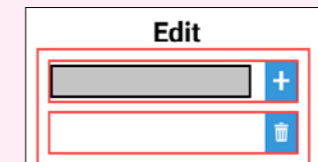
This problem can now be easily fixed by making the layout boxes visible.  
 Example:



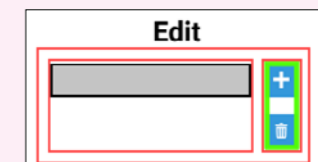
You create 2 buttons (Add and Delete) next to a control that can be extended vertically.  
 Surprise: at runtime, the 2nd button is displayed below the control!



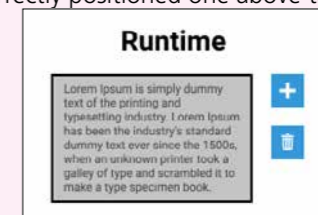
Now, using the new feature from version 26, you can view the layout boxes that contain these controls



By viewing these boxes you can easily identify the cause of the problem: as the control became larger, the top box pushed the bottom box, which contains the Delete button!  
 So we create a "cell" (in green) and we place the 2 buttons inside it. This modification automatically triggers a new calculation of the boxes.



Thus, at runtime, using the cell and the new boxes, the 2 buttons remain correctly positioned one above the other



**Benefit provided by this new feature of version 26:**  
*Sometimes you have to think inside the box*

*Continues page 78...*



# CUSTOM WEB PRINTING

Nowadays, most applications and websites allow you to print the content of their pages.

However, the print layout is often different from the page displayed:

- a black background will be removed so as to save ink, and white text will become black
- ad banners will not be printed
- alignment will be optimized to get an ideal print layout
- ...

In version 26, WEBDEV makes it easy to create print-ready pages from a web page. WEBDEV 26 uses the "Media query" mechanism supported by browsers to automatically switch to the printable page. Everything is automatic with WEBDEV 26.

# CUSTOM WEB PRINTING

## 742 New feature WD WB WM NEW LAYOUT: PRINT

WEBDEV 26 offers an easy way to define layouts: simply create a new Layout for the page. Thus the page and its content are not duplicated: easier maintenance, high-quality sites... A new layout is introduced in version 26: Print layout. In this layout, you can simply:

- hide unwanted controls
- reposition the desired controls
- optimize the colors for printing

The layout of the original page is not changed. If the original page is changed, depending on your choice, the changes can be automatically applied (or not) to the print layout.

You can dissociate the desired properties of each control. No programming required!  
**Benefit provided by this new feature of version 26:**  
*How did you do it before?*

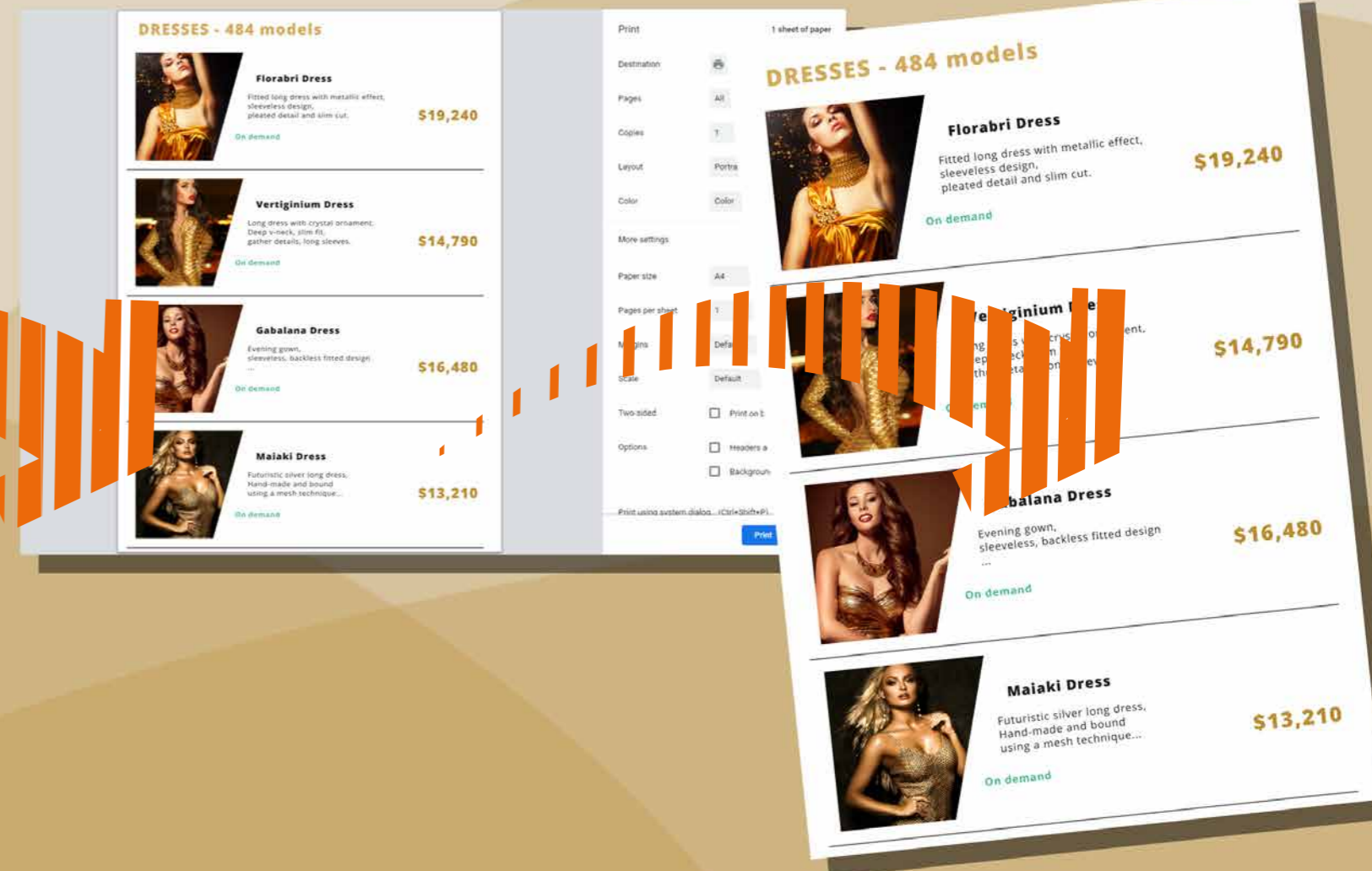
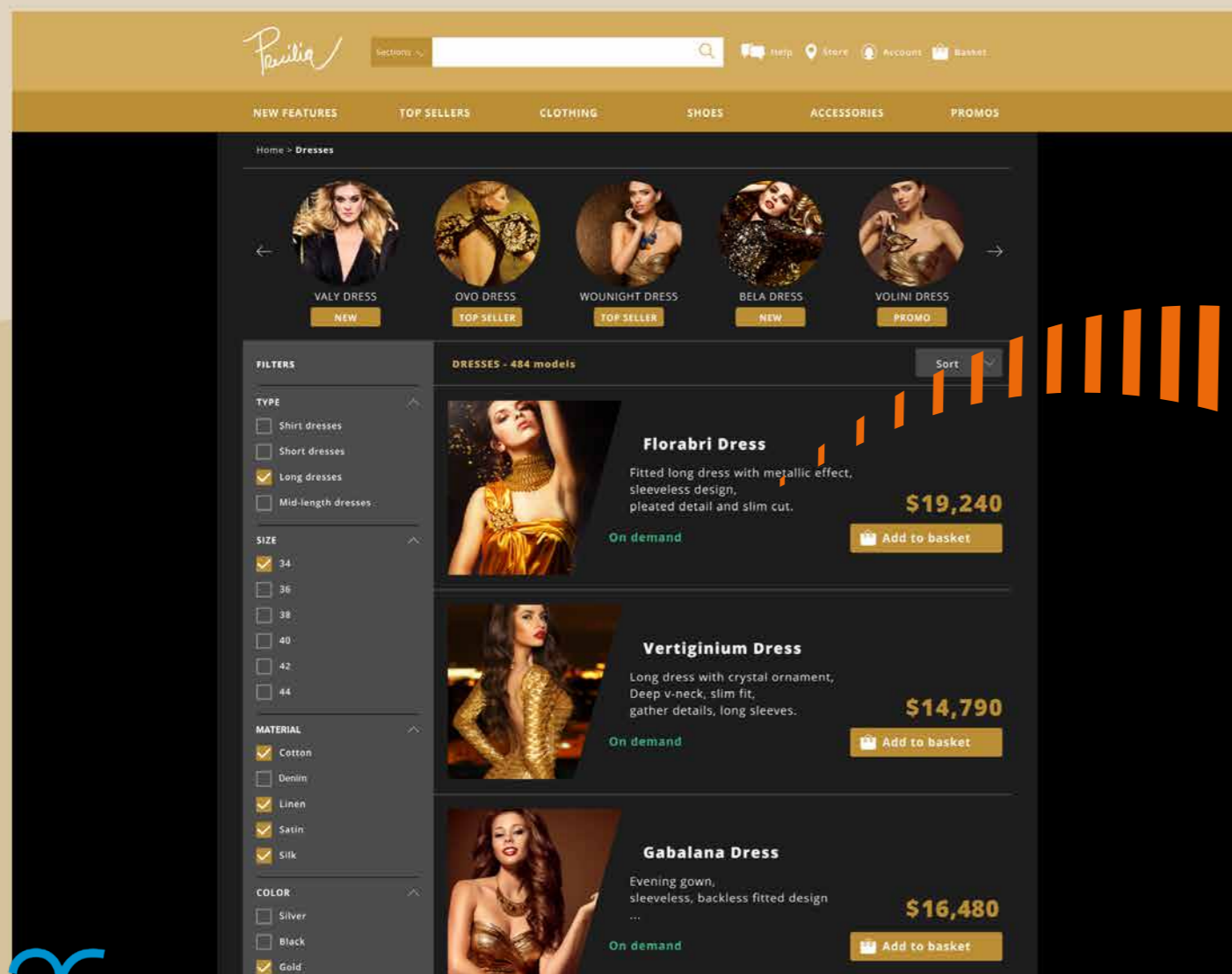
## 743 New feature WD WB WM LAYOUT: NEW OPERATING MODE

WEBDEV 26 allows you to create layouts in no time. Now you can easily modify the parameters of a set of controls: for example, remove a black background, or change the font color from white to black.  
**Benefit provided by this new feature of version 26:**  
*Simpler layouts*

WEBDEV SITE

PRINT PREVIEW

PRINTED PAGE





# IMPORT STYLES FROM A WORDPRESS TEMPLATE



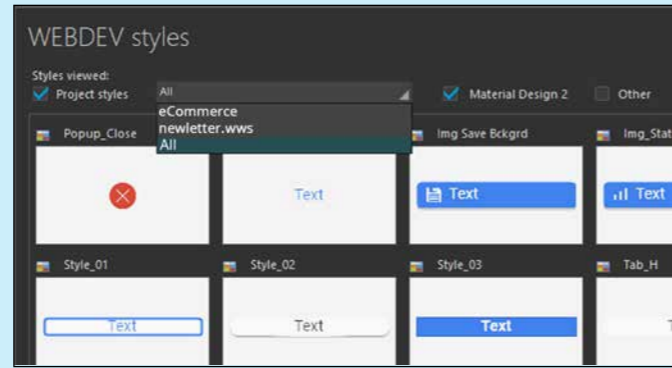
# WORDPRESS TEMPLATE STYLES

## 744 New feature WD WB WM POWERFUL STYLE SHEET MANAGEMENT

In version 26, WEBDEV simplifies the creation and management of style sheets.  
In version 26, style sheets are completely independent and can be shared between several projects, locally or via the SCM. Each style sheet has a name.  
A project can use multiple style sheets.  
And the same style sheet can be used in several projects.  
Of course, when a style from the style sheet changes, these changes are automatically applied to all the pages that use the style sheet.

**Benefit provided by this new feature of version 26:**  
Manage the presentation of your pages with ease

## 745 New feature WD WB WM STYLE SELECTION: A REFINED OPERATING MODE



In the 7-tab window, you can now choose which style sheets are shown in the style presentation window. This allows you to view only the styles you actually use.

The filter allows for multiple selection: you can select various style sheets.  
**Benefit provided by this new feature of version 26:**  
Precise choices

## 746 New feature WD WB WM AUTOMATICALLY IMPORT STYLES AND IMAGES FROM A WORDPRESS TEMPLATE

When importing styles from a Wordpress Template, WEBDEV 26 analyzes the content of the template, extracts and generates the styles used.  
WEBDEV also imports images from pages in the template. The import creates the style sheet based on the template, and allows the import of images used in the examples provided with the template.  
Please refer to the license of each template to make sure you can import these elements.  
You can import multiple templates into the same project: each

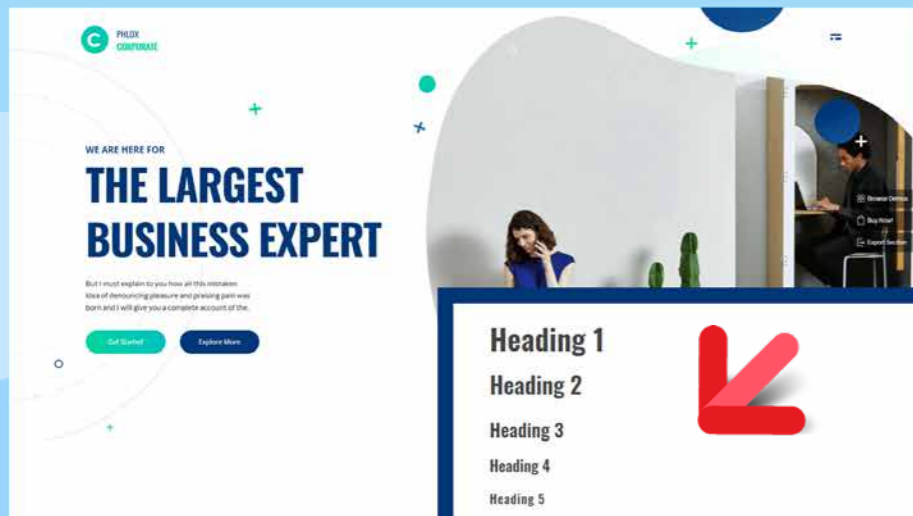
style sheet remains independent of the others.  
**Benefit provided by this new feature of version 26:**  
A new style sheet and a directory with the images

## 747 New feature WD WB WM CREATION OF A STYLE SHEET

When the import is validated, a style sheet containing all the styles of the template is created.  
You can then use these styles to create your WEBDEV pages. Styles are created for the following controls:

- title
- static
- edit
- button
- image
- menu
- table
- looper
- cell
- ...

An example page containing all the imported styles is created: you can view the style in a real use case.  
**Benefit provided by this new feature of version 26:**  
Creation of a WEBDEV style sheet



## WORDPRESS THEME

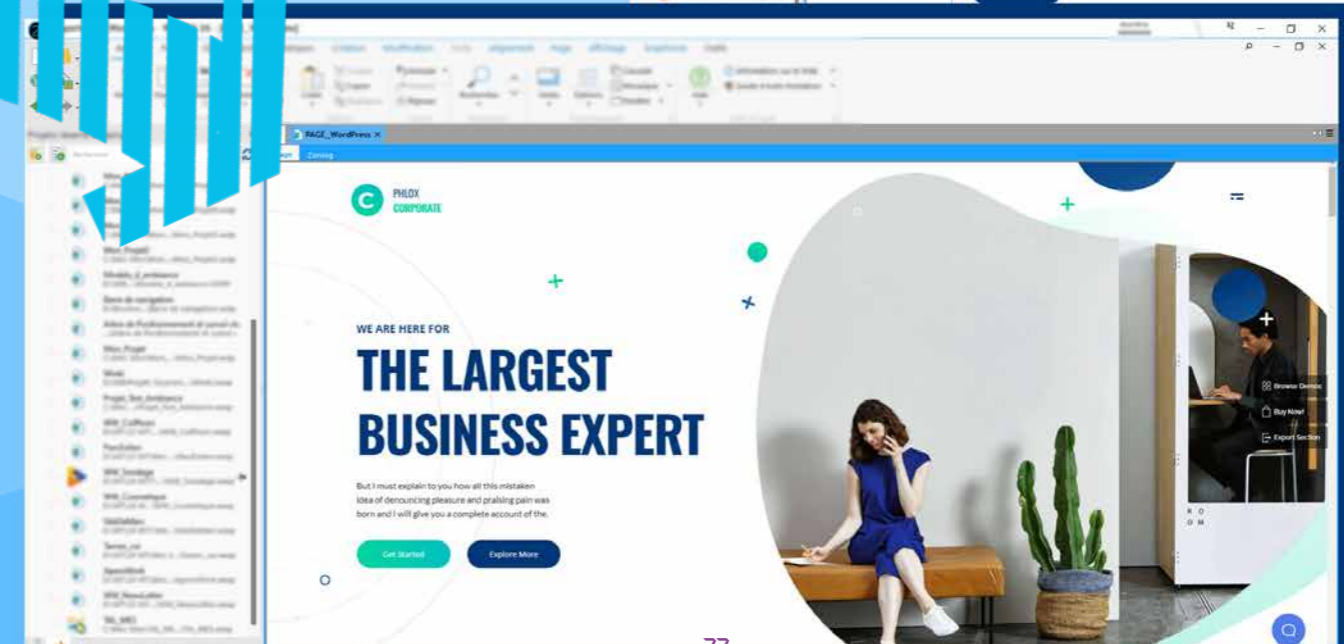
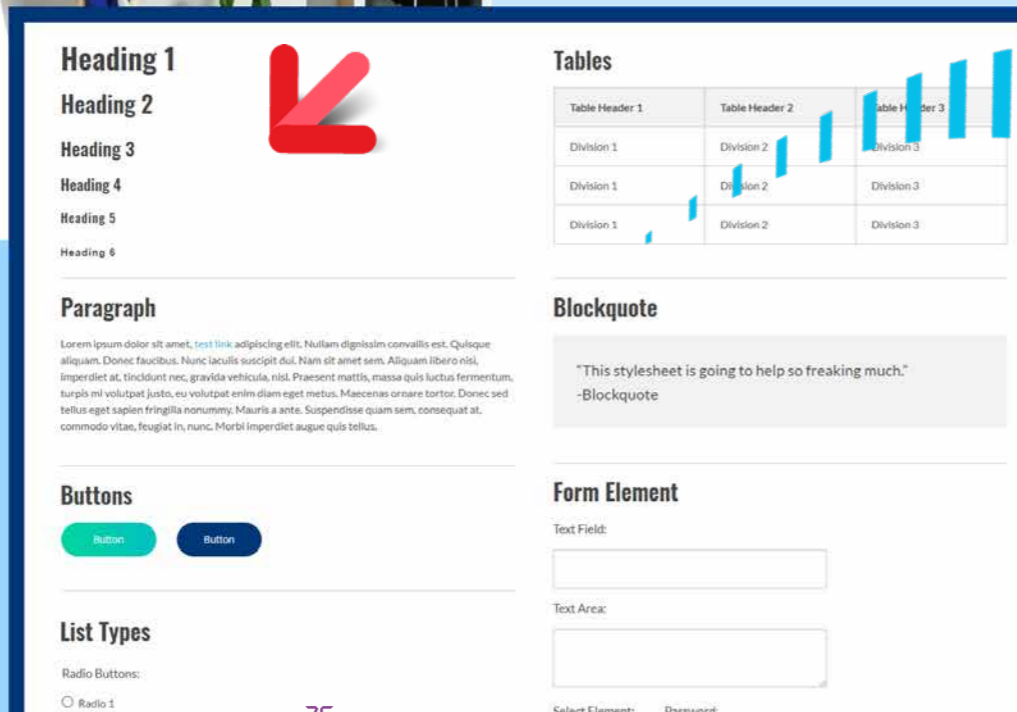
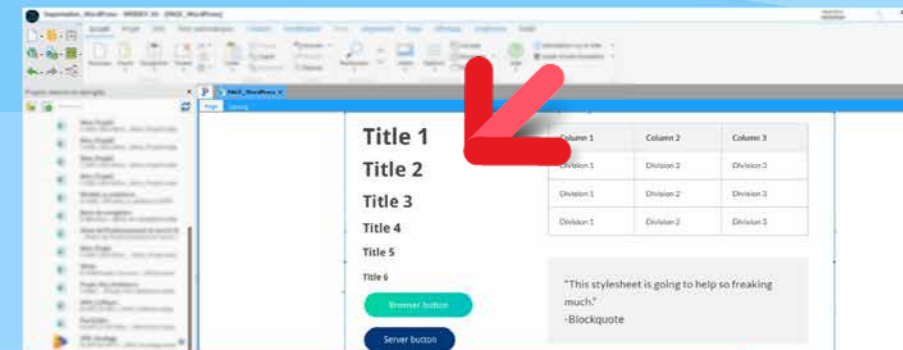
Page in edit mode (left).

The Wordpress template is opened in the WEBDEV 26 editor as an example page.

A style sheet is created from the template styles with one click!

You can then use these styles in your site.

## WEBDEV PAGE





# 748 to 762

New feature WD WB WM

## PAGE EDITOR: 15 OTHER IMPROVEMENTS

Among the other new features of the editor, you will find:

- "Borders" option: it also displays the borders of zoning areas. No need to switch between the "page/zoning" panes
- Tooltip: it indicates if the selected control is different from the control being hovered over
- Easier alignment of numeric or currency values
- New options in the popup menu of a control, to set the visibility of this control by layout (same as RWD)
- If a multiple selection contains non-moveable controls from templates, you can still move the rest of the selected controls
- Deployment of a site in the Cloud with 1 click
- If the page and browser background colors are identical, the page frame is represented with a dotted line
- Editor: images on pages are automatically updated if they have been edited with an external tool
- Easier editing of cells with relative positioning
- Better management of 4K screens in edit mode
- Improved editing of Layout controls
- Import fonts: you can use fonts from the Google Fonts server, so you don't have to copy them to your source locations and servers
- RWD: the size of a supercontrol adapts to all the slices when applying refactoring options
- You can now select colors in the palette editor using a color dropper
- In version 26, you can dissociate CSS styles with one click, without leaving the style editor.

**Benefit provided by this new feature of version 26:**  
*15 significant improvements!*

# 763

New feature WD WB WM

## THE RETURNED HTML IS READABLE!

WEBDEV automatically generates the HTML code of WEBDEV pages. For aesthetic purposes, the HTML page returned by the WEBDEV 26 Application Server can now be formatted (with indentation).

**Benefit provided by this new feature of version 26:**  
*For web users who really care about aesthetics...*



## TYPESCRIPT: A NEW STANDARD



# 764

New feature WD WB WM

## WHAT IS TYPESCRIPT? JAVASCRIPT, ONLY BETTER

```

1  interface User {
2    name: string;
3    identifier: number;
4  }
5
6
7  class UserAccount {
8    name: string;
9    identifier: number;
10
11    constructor(name: string, identifier: number) {
12      this.name = name;
13      this.identifier = identifier;
14    }

```

TypeScript code

The TypeScript language is more and more widely used. This rigorous superset of JavaScript provides a compiler, which detects problems at compile time and not only at runtime, like JavaScript.

In version 26, you can write (or paste) TypeScript code in WEBDEV pages. All the processes that supported JavaScript code now support TypeScript code as well. TypeScript compilation errors appear in the WEBDEV project's list of compilation errors.

**Benefit provided by this new feature of version 26:**  
*More rigorous JavaScript*

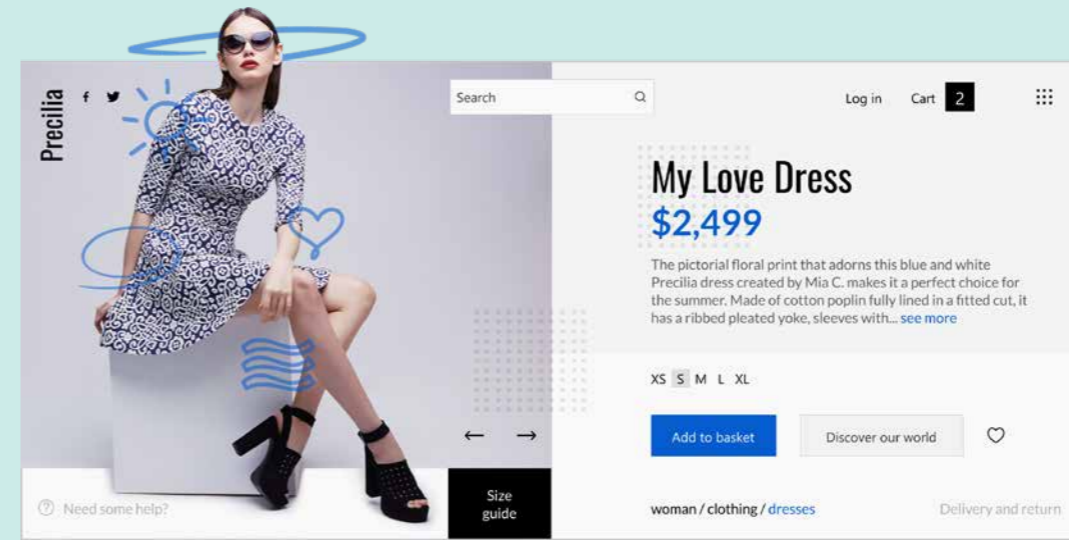
# 765

New feature WD WB WM

## TYPESCRIPT: USE EXAMPLES

You can use TypeScript code in different ways:

- Copy/paste TypeScript code
- Write TypeScript code



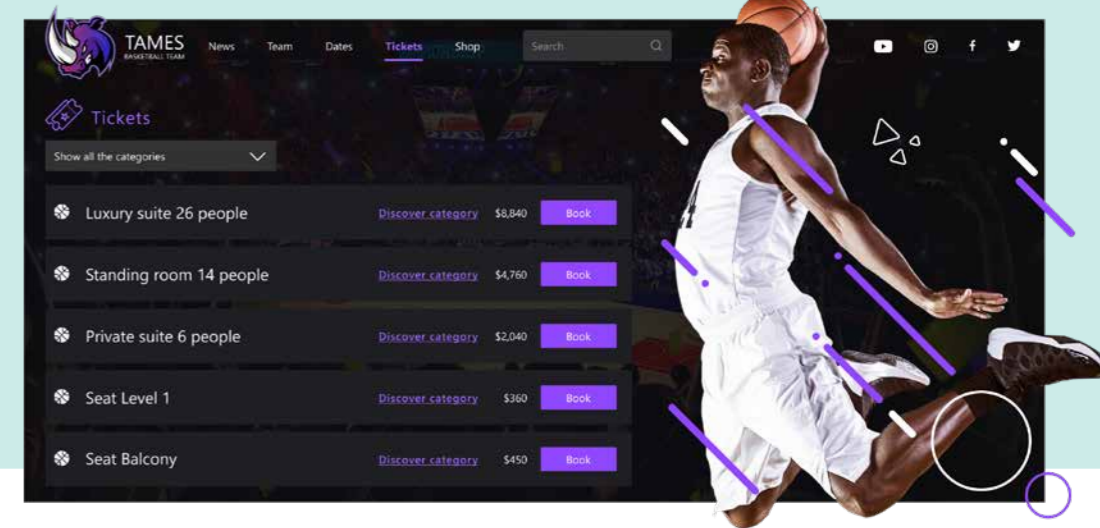
# 767

New feature WD WB WM

## 2 NEW SKINS

2 new skins are provided in version 26: Jupiter and Suki. Use these skins for your sites as you like!

**Benefit provided by this new feature of version 26:**  
*More and more choices*



This open approach brings many advantages.

**Benefit provided by this new feature of version 26:**  
*More rigorous code*

- selection bar style
  - return selected row number
- The expected UX behavior is now automatic.

## LOOPERS IN WEBDEV: SELECT MODE, FINALLY

# 766

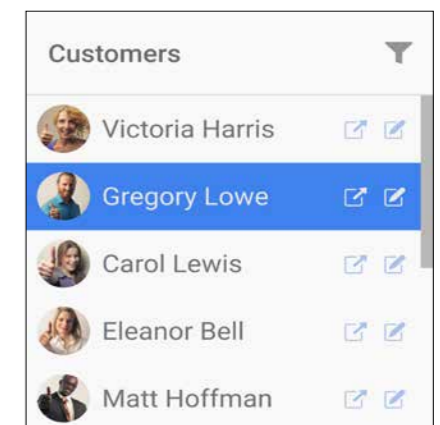
New feature WD WB WM

## LOOPER: SELECT MODE SUP- PORTED

The selection of rows from Looper controls is now automatically managed.

This feature greatly simplifies programming and offers rich functionalities:

- hover bar
- selection bar
- hover bar style



Row from a Looper control in select mode

**Benefit provided by this new feature of version 26:**  
*Select mode enabled!*



# WEBSOCKET SERVER: COMMUNICATION INITIATED BY THE SERVER

## HANDLE SOCKETS WITH EASE

### 768 New feature WD WB WM HANDLE WEBSOCKETS

In version 26, the WEBDEV Application Server includes a WebSocket server as standard.

**Benefit provided by this new feature of version 26:**  
A powerful feature

### 769 New feature WD WB WM A SOCKET USE CASE

Let's suppose you want to display stock levels in real time on

a site.

You have 2 main possibilities to program this feature:

1. set up a timer in the page that calls the server at regular intervals to read the stock value of a given article, and display this value if it has changed.
2. use a WebSocket: if the stock changes, and only in this case, the server sends the new value to the page.

In the first case, with a timer, a large number of requests will be sent to the server. This, multiplied by the number of web users, will end up creating a lot of pointless traffic...

This can cause a huge server load and unnecessary bandwidth consumption.

In the second case, with WebSockets, there will be communication only when the value of the stock changes: this is clearly a better option.

**Benefit provided by this new feature of version 26:**  
Who wouldn't like to avoid pointless traffic?

# WEBSOCKET SERVER

## 770 New feature WD WB WM WEBSOCKET PROGRAMMING

New events are introduced to program WebSockets in server code.

- Connection of a new client
- Receiving data from a client
- Disconnection of a client.

A "client" is, for example, a session of a web user. New WLanguage functions have also been introduced.

To write to the client, simply use the new `WebSocketSend` function.

The new `websocketClient` WLanguage type contains information about the connected client: IP, ...

The new `WebSocketListConnectedUser` function returns an array containing a list of all connected clients.

The following elements can trigger the sending of a WebSocket: a trigger, a data modification detected by `HTrack`, a WebSocket sent to another server, the presence of a new file on the disk, or a trigger in the new `GlobalService` event executed on the server in a loop.

By using WebSockets, you limit the web server load.

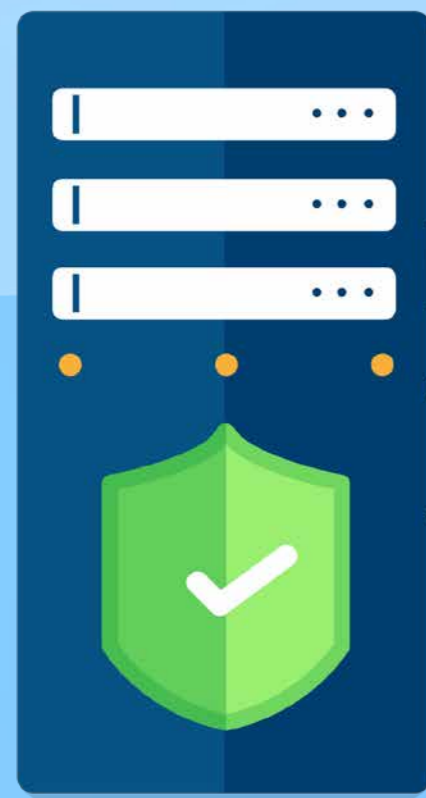
**Benefit provided by this new feature of version 26:**  
Easy programming

### EXAMPLES OF EASILY- ACHIEVABLE PROCESSES

- collaborative work
- chat/video call system
- multiplayer gaming

No more timers consuming bandwidth and overloading the server

## WEBDEV APPLICATION SERVER (WITH DATABASE)



WEBSOCKET

WEBSOCKET

WEBSOCKET

## WEBSITE (IN A BROWSER)





## POPOP CONTROL USEFUL IMPROVEMENTS

### 771 New feature WD WB WM A POPUP CAN BE AN INDEPENDENT PAGE

A Popup control can now be an independent, easy-to-reuse page.

`PopupDisplay(MyPage)` is now a valid syntax! The Popup control no longer has to be saved in the calling page.

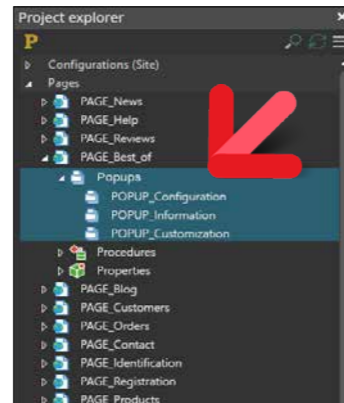
**Benefit provided by this new feature of version 26:**  
No need to create a page template to reuse a Popup

### 772 New feature WD WB WM TEMPORARY POPUP: CLOSED WHEN THE USER CLICKS ELSEWHERE

For web users, a common way to close a popup is to simply click outside the Popup (or press Esc). In version 26, this behavior is available as standard. You can find it in the 7-tab window, or by programming, with the `popupDiscardable` parameter of the `PopupDisplay` function.

**Benefit provided by this new feature of version 26:**  
A standard operating mode

### 773 New feature WD WB WM EASILY SELECT ELEMENTS IN THE PROJECT EXPLORER



A new element is added to the list in the project explorer: Popups. It is now easy to find and select your Popups.

**Benefit provided by this new feature of version 26:**  
A more natural operating mode

### 774 New feature WD WB WM QUICK POPUP CREATION

Popups can now be created quickly via the drop-down menu that contains the list of popups in the page.

**Benefit provided by this new feature of version 26:**  
Small, yet useful new feature

### 775 New feature WD WB WM POPUPS: MISCELLANEOUS

- The `PopupClose` function is now available in server code. This simplifies the code.
- In edit mode, Popups now have their own close button. This allows you, for example, to open several Popups simultaneously..

**Benefit provided by this new feature of version 26:**  
Small, yet useful new features

## TRANSFORM YOUR WINDEV APPLICATIONS INTO WEBDEV SITES: EASIER AND EASIER

### 776 New feature WD WB WM WEBIFICATION MADE EASIER AND EASIER

Transforming your existing WINDEV applications (or parts of applications) into websites is easier than ever before. The new environment with split view (see new feature 065) allows you to edit a Desktop window and a page at the same time, which makes everything easier. The migration wizard helps you even more during the webification process.

**Benefit provided by this new feature of version 26:**  
Transform your WINDEV applications into websites or SaaS



## RESPONSIVE WEB DESIGN (RWD)

### 777 New feature WD WB WM DISSOCIATION OF CONTROL SIZE AND POSITION

In Responsive mode, you can quickly dissociate the size and position of a control from the main resolution slice, via the context menu.

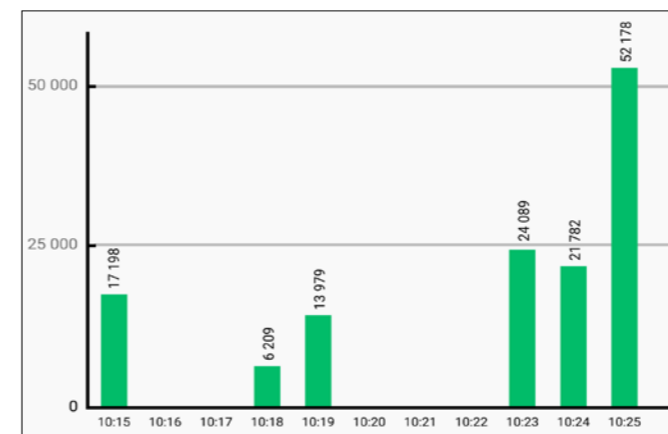
It is no longer necessary to repeat this operation in each slice.  
**Benefit provided by this new feature of version 26:**  
Less actions

## CHART

### 778 New feature WD WB WM CHART IN WEBDEV: NEW AUTOMATIC TIME SCALE

In version 26, WEBDEV offers an automatic time scale for times in charts.

The data is positioned according to the time scale. Everything is automatically managed.



Proportional time scale

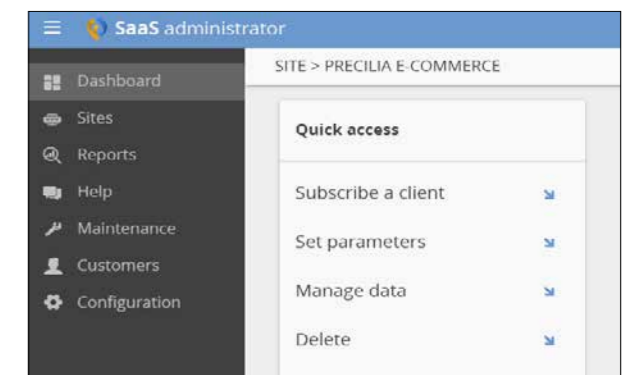
**Benefit provided by this new feature of version 26:**  
Data always on time...

## SAAS



### 779 New feature WD WB WM EXTREME FACELIFT

The SaaS site has been revamped to meet today's web fashion demands!



A modern look

**Benefit provided by this new feature of version 26:**  
Modernization

## SINGLE-PAGE APPLICATION (SPA)

### 780 New feature WD WB WM SPA: EASY PROGRAMMING

The improvements made in version 26 allow you to develop Single Page Applications (SPA) more easily:

- new features of Popups (see new feature 771)
- synchronization of global variables during Ajax calls (see new feature 863)
- select mode in Looper controls (see new feature 766)
- Websocket server (see new feature 768)
- simultaneous display of the different layers of a cell/page (see new feature 065)
- ...

**Benefit provided by this new feature of version 26:**  
WEBDEV 26 is open to all architectures



## SOCIAL NETWORKS



### 781 New feature WD WB WM PIN TO PINTEREST

You can set images to be pinned in Pinterest. Version 26 includes a button with all the necessary code.

**Benefit provided by this new feature of version 26:**  
Pin your images

## BROWSER WLANGUAGE

### 782 New feature WD WB WM NEW PROCESS IN BROWSER CODE: CHANGE PAGE SIZE

The "Change page size" event allows running a process in Browser code when the user resizes the browser. This makes it possible to:

- change font sizes
- modify controls by programming
- change or resize an image
- ...

**Benefit provided by this new feature of version 26:**  
For advanced processes

### 783 New feature WD WB WM WLANGUAGE FUNCTION SELECTCOLOR IN BROWSER

The `selectColor` function is available in Browser code.

**Benefit provided by this new feature of version 26:**  
Less code

### 784 New feature WD WB WM NEW BUFFER TYPE IN BROWSER

The `Buffer` type is available in Browser code. This type makes it possible to use binary data.

**Benefit provided by this new feature of version 26:**  
Practicality

New feature WD WB WM

### 785 to 804 20 NEW BROWSER WLANGUAGE FUNCTIONS

|                                    |                   |                   |                       |
|------------------------------------|-------------------|-------------------|-----------------------|
| BufferToHexa                       | CarteDisplayPopup | MapDisplayArea    | MapAddShape           |
| MapAddImage                        | MapChangeStyle    | MapClosePopup     | MapLimitArea          |
| MapModifyShape                     | MapModifyImage    | MapPopupDisplayed | MapGetStyle           |
| MapDeleteShape                     | MapDeleteImage    | DateTimeToString  | InWebSocketServerMode |
| InWebSocketServerGlobalServiceMode | geoGetArea        | HexaToBuffer      | SelectColor           |

**Benefit provided by this new feature of version 26:**  
Enriched browser code

## SERVER WLANGUAGE

### 805 New feature WD WB WM DELETE COOKIES BY PROGRAMMING

The new `CookieDelete` WLanguage function allows you to delete cookies! Note that this function is available both in Server and Browser code.

**Benefit provided by this new feature of version 26:**  
You can now program your own cookie monster

New feature WD WB WM

### 806 to 860 SERVER CODE: 55 NEWS FUNCTIONS

55 new WLanguage functions are available in Server code:

|                                     |                                  |                        |  |
|-------------------------------------|----------------------------------|------------------------|--|
| AJAXCallInProgress                  | BufferToPhrase                   | MapAddShape            | MapAddImage                            |
| MapModifyShape                      | MapModifyImage                   | MapDeleteShape         | MapDeleteImage                         |
| CookieDelete                        | DateTimeToString                 | LastDayOfYear          | TwoFactorAuthenticationGenerateTOTPKey |
| TwoFactorAuthenticationGenerateLink | TwoFactorAuthenticationCheckCode | InWebSocketServerMode  | InWebSocketServerGlobalServiceMode     |
| ErrorReset                          | fninsertTextAtBeginning          | GenerateLorem          | geoGetArea                             |
| gpwPageURL                          | HJSONToRecord                    | HSuggestKey            | HSuggestKeyStart                       |
| HSuggestKeyEnd                      | HTMLFindElementById              | HTMLFindElementByName  | HTMLBuildString                        |
| HTMLOpen                            | HTMLSave                         | HTransactionInProgress | HTriggerRecordBefore                   |
| OCRLoadLanguage                     | OCRDetectTextArea                | OCRExtractTextBlock    | OCRExtractText                         |
| OCRParameter                        | OCRModelPathDirectory            | OCRDeleteAllLanguages  | PDFExtractPage                         |
| PhraseToBuffer                      | RegistryCopyKey                  | RegistryListkey        | RegistryRename                         |
| sListPort                           | ArrayDistinct                    | ArrayIntersect         | ArrayUnion                             |
| ArrayUnionAll                       | WebSocketDisconnect              | WebSocketSend          | WebSocketRun                           |
| WebSocketListUser                   | zipExtractDirectory              | zipFilter              |  |

# OPENNESS: FRONT-END IN BOOTSTRAP, ANGULAR, REACT, VUE.JS,...



### 861 New feature WD WB WM USE VIA HTML PAGES : MAP YOUR ACTIVE WEBDEV PAGE WITH A THIRD-PARTY PAGE

- Bootstrap
- Angular
- React
- Vue.JS
- ...

are widely used to create pages.

In version 26, you can easily use pages created with one of these frameworks in a WEBDEV site.

You can thus benefit from both the power of the WEBDEV Application Server and from your experience with these frameworks.

WLanguage communicates with the code that uses these frameworks via procedure calls.

In the Active WEBDEV Page, you can use Browser and Server procedures. You can call these WLanguage procedures from the JS code of the HTML page that uses the third-party framework.

This means you can always take advantage of the power of WLanguage on the Application Server.

You can use your existing elements.

**Benefit provided by this new feature of version 26:**

WEBDEV 26 is open to all architectures

### 862 New feature WD WB WM A SIMPLE OPERATING MODE

The operating mode is simple:

- Create an Active WEBDEV Page without interface, and write the WLanguage code in this page: Browser and Server procedures.
- Integrate a `<script src = page.awp >` tag in the HTML page created with the third-party framework (Bootstrap, etc.)
- In the JS code of this third-party page, call the procedures written in WLanguage.

**Benefit provided by this new feature of version 26:**  
Easy implementation

- Call the business logic of your WLanguage code from raw HTML/JS pages
- Read or write HFSQL data
- Generate a PDF
- Create a DOCX
- Send an email
- Send notifications to mobile devices

## BROWSER

## WEBDEV SERVER





## AJAX



### 863 New feature WD WB WM AJAX SYNCHRONIZED VARIABLES

Variables automatically synchronized between Server and Browser are managed during Ajax calls.

**Benefit provided by this new feature of version 26:**  
Useful automation

```
IF AJAXCallInProgress() THEN
    //Ajax call, the page has already been loaded for the
    first time
    //=> no action
ELSE
    //The page is loaded for the first time
    //=> fill the charts displayed in the page
    FillCharts()
END
```

**Benefit provided by this new feature of version 26:**  
It doesn't get simpler than this

## AWP

### 864 New feature WD WB WM AWP AND AJAX CALL: SPECIFIC INITIALIZATION

In AWP mode, each Ajax call reloads the page on the server, and thus executes the page initialization event (Declarations of the global variables and Page initialization). In version 26, you can determine whether the page has already been loaded, therefore not re-running some initializations.

The function is called `AJAXCallInProgress`.

## JSON



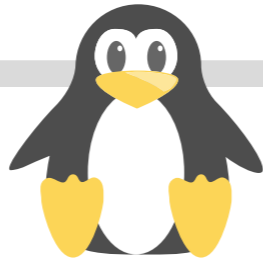
### 865 New feature WD WB WM ASSIGNING VALUES TO JSON VARIABLES: 2X FASTER

The assignment of content to JSON variables is now twice as fast.

In some cases it is even five times as fast!

**Benefit provided by this new feature of version 26:**  
The faster, the better!

## LINUX



### 866 New feature WD WB WM POWERFUL NEW FEATURES

OCR and `Websocket` functions are available in WEBDEV for Linux. These powerful features are particularly useful.

**Benefit provided by this new feature of version 26:**  
Advanced programming in Linux

New feature WD WB WM

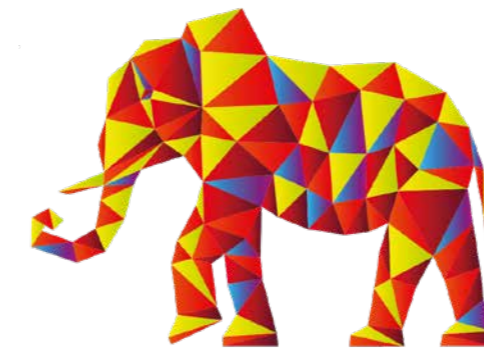
### 867 to 916 51 NEW WLANGUAGE FUNCTIONS ON LINUX

51 new functions are available on Linux:

|                                     |                                  |                       |  |
|-------------------------------------|----------------------------------|-----------------------|--|
| AJAXCallInProgress                  | BufferToPhrase                   | MapAddShape           | MapAddImage                            |
| MapModifyShape                      | MapModifyImage                   | MapDeleteShape        | MapDeleteImage                         |
| CookieDelete                        | DateTimeToString                 | LastDayOfYear         | TwoFactorAuthenticationGenerateTOTPKey |
| TwoFactorAuthenticationGenerateLink | TwoFactorAuthenticationCheckCode | InWebSocketServerMode | InWebSocketServerGlobalServiceMode     |
| ErrorReset                          | fnInsertTextAtBeginning          | GenerateLorem         | geoGetArea                             |
| gpwPageURL                          | HJSONToRecord                    | HSuggestKey           | HSuggestKeyStart                       |
| HSuggestKeyEnd                      | HTMLFindElementById              | HTMLFindElementByName | HTMLBuildString                        |

|                   |                       |                        |                      |
|-------------------|-----------------------|------------------------|----------------------|
| HTMLOpen          | HTMLSave              | HTransactionInProgress | HTriggerRecordBefore |
| OCRLoadLanguage   | OCRDetectTextArea     | OCRExtractTextBlock    | OCRExtractText       |
| OCRParameter      | OCRModelPathDirectory | OCRDeleteAllLanguages  | PhraseToBuffer       |
| sListPort         | ArrayDistinct         | ArrayIntersect         | ArrayUnion           |
| ArrayUnionAll     | WebSocketDisconnect   | WebSocketSend          | WebSocketRun         |
| WebSocketListUser | zipExtractDirectory   | zipFilter              |                      |

**Benefit provided by this new feature of version 26:**  
Better cross-platform



### 917 New feature WD WB WM NEW SYNTAX IN PHP

The WLanguage syntax `FOR EACH STRING` with position and counter is now supported in PHP.

**Benefit provided by this new feature of version 26:**  
New possibilities in PHP

### 918 New feature WD WB WM JSON SERIALIZATION IN PHP

JSON serialization is available in PHP.

**Benefit provided by this new feature of version 26:**  
New possibilities in PHP

### 919 New feature WD WB WM 5 NEW WLANGUAGE FUNCTIONS FOR PHP

5 new functions are available in PHP:

|                                    |        |        |                       |
|------------------------------------|--------|--------|-----------------------|
| AJAXCallInProgress                 | Decode | Encode | InWebSocketServerMode |
| InWebSocketServerGlobalServiceMode |        |        |                       |

**Benefit provided by this new feature of version 26:**  
WLanguage improvements

## SIMPLIFIED ADMINISTRATION

### 920 New feature WD WB WM ACCOUNT MANAGEMENT AND SERVER ADMINISTRATION: ALL IN ONE TOOL

In version 26, there is only one server administration tool: WD-Compte has been merged into the Hosting Control Center. Managing accounts is now much easier! Navigation in the administrator is more fluid.

**Benefit provided by this new feature of version 26:**  
Useful merge

### 921 New feature WD WB WM SERVER SITES: EASY ACCESS

When entering the address of a WEBDEV application server, a new option allows you to display all the sites available on the server, including the administration sites.

This option should be used only in secure environments. For security reasons, the standard method (full path) is still available.

**Benefit provided by this new feature of version 26:**  
Practical for internal use

### 922 New feature WD WB WM INSTALLING THE APPLICATION SERVER: SIMPLIFICATION

The standard setup mode with account management is still available.

However, a new simplified setup mode that manages only one account has been introduced.

This simplified mode... simplifies the administration and deployment of a server within a small private structure.

**Benefit provided by this new feature of version 26:**  
Practical for internal use

## REST WEBSERVICES

### 923 New feature WD WB WM REST WEBSERVICES EDITOR

In version 26, the REST Webservices editor has been revamped: Cleaner UI, ability to sort entry points, creation of entry points from a set of procedures...

**Benefit provided by this new feature of version 26:**  
Simplification...



Yes, version 26  
is available!



## 924 New feature WD WB WM WEBSERVICE PARAMETER: AUTOMATIC JSON TYPE

In version 26, 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 26:**  
*Simpler code...*



## APPLICATION SERVER

## 925 New feature WD WB WM 2X FASTER APPLICATION SERVER: SPEED +100%

In version 26, the Application Server uses FastCGI and is on average twice as fast as in version 25.  
Of course, speed may vary depending on the code of the site, but the difference is mind-blowing when it comes to simultaneous accesses to the server.

**Benefit provided by this new feature of version 26:**  
*The faster, the better*

## 926 New feature WD WB WM SESSION HEARTBEAT: MORE EFFICIENT THAN TIMEOUTS WHEN THE USER CLOSES THE BROWSER

Each web user's session has a timeout: the session will be automatically closed if the user remains inactive and the timeout is reached.

Even if the user has closed the browser, resources are consumed on the server until the timeout is reached.  
Too bad!

The HeartBeat feature is an automatic process on the browser that regularly sends information to the server (e.g. every 5 minutes) to indicate that the browser is open.  
Once the user has closed the browser, the server no longer receives this HeartBeat and can therefore close the session immediately, without waiting for the timeout.  
The HeartBeat is usually 5 minutes, while timeouts often take tens of minutes.

If the timeout is set to 60 minutes, the server saves 55 minutes per closed browser, which is significant.

**Benefit provided by this new feature of version 26:**  
*Save server resources*

## 927 New feature WD WB WM SECURITY: REFUSE TO RESPOND TO HTTP REQUESTS OR SERVER CODE TRIGGERS (PROLOGUE FUNCTION)

Reminder: the browser sends HTTP (or HTTPS) requests to the server to get the page, images, or to trigger the execution of an Ajax process, etc.

In some cases, the server may have to refuse to execute incoming HTTP requests:

- performance
- denial-of-service attack
- security against suspicious requests
- filter criteria
- ...

In version 26, the new `SessionPrologue` WLanguage function allows you to specify a procedure that will be called each time an HTTP (or HTTPS) request is received.

This procedure will check the HTTP request (IP, content, etc.) and will decide whether or not to execute it.

This procedure is coded by the author of the site.

**Benefit provided by this new feature of version 26:**  
*Maximum security for your sites*

## 928 New feature WD WB WM 64-BIT TEST APPLICATION SERVER

The application server for tests and access to less than 10 simultaneous connections is now also available in 64-bit.

**Benefit provided by this new feature of version 26:**  
*Tests in a real configuration*

## DOCKER DEPLOYMENT



## 929 New feature WD WB WM DOCKER IMAGE OF A SITE: BETTER CONFIGURATION

In the generated Docker image, the root of the website points to the site included in the image (`_web` directory).  
By simply entering the address (IP or DNS name) of the deployed docker image, the user accesses the website directly.  
No need to enter the full address of the site on the server.

**Benefit provided by this new feature of version 26:**  
*Easy Docker deployment*

## DEPLOYMENT OF YOUR SITES

## 930 New feature WD WB WM 3X FASTER DEPLOYMENT

The deployment of large sites has been optimized, and is now three times faster.

**Benefit provided by this new feature of version 26:**  
*Deploy your sites in no time!*

## 931 New feature WD WB WM DEPLOYMENT AUTOMATION

In version 26, you can deploy sites via a new action in the Continuous Integration: "Site deployment".

**Benefit provided by this new feature of version 26:**  
*Automation and security*

## AND MUCH MORE...

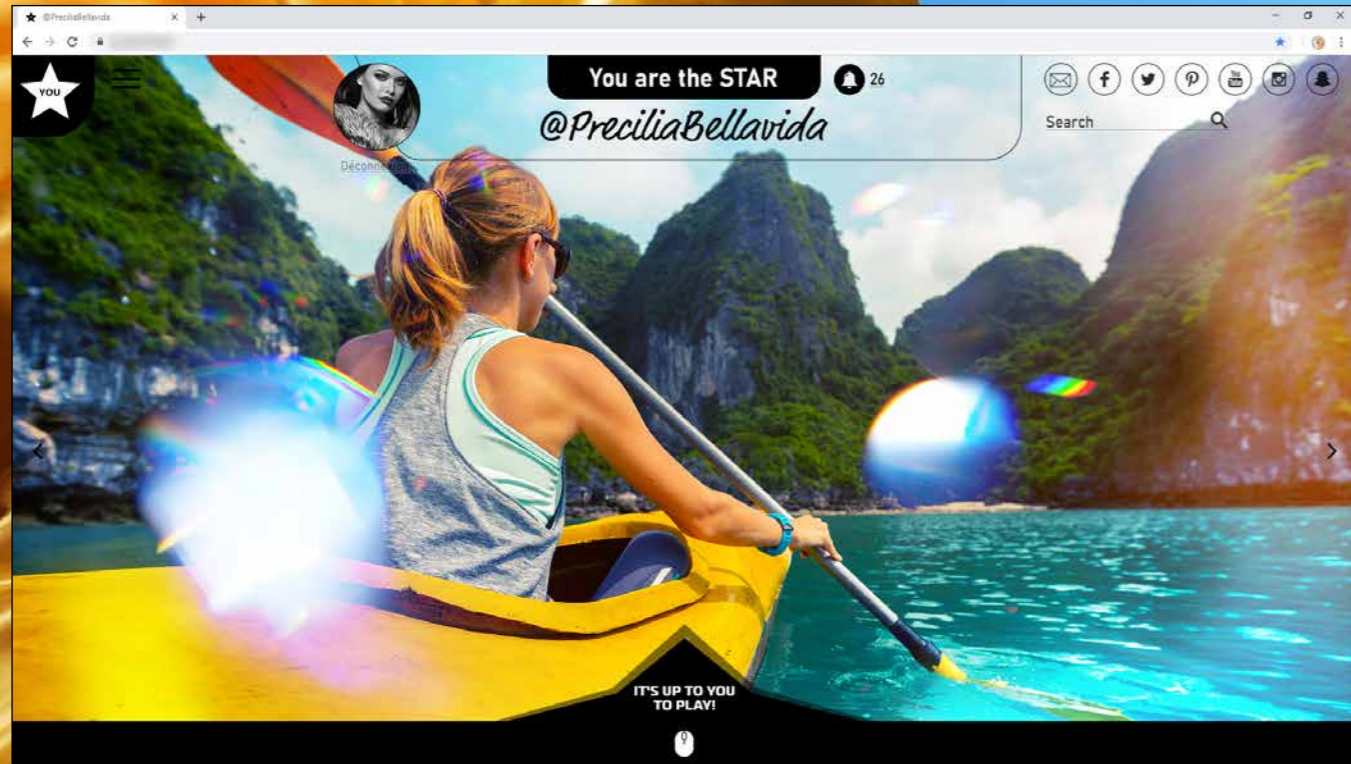
## 932 New feature WD WB WM AND MANY OTHER NEW FEATURES

Version 26 offers many other new features that you will discover once you have ordered and received your product...





# VERSION 26, A MYRIAD OF NEW FEATURES

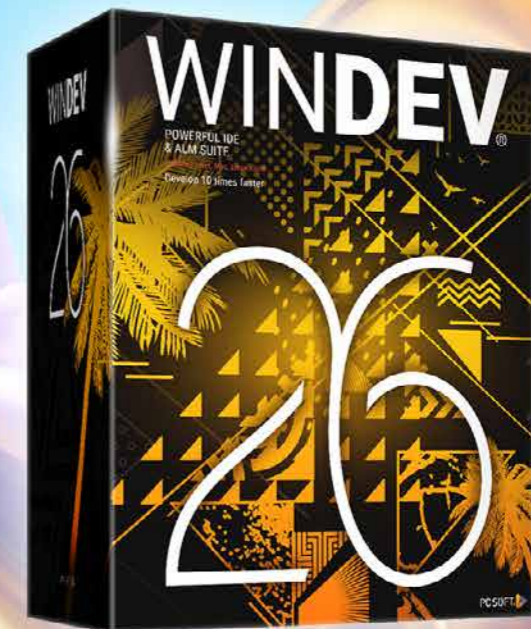


YOUR  
APPLICATIONS  
ARE FASTER  
AND MORE  
BEAUTIFUL  
IN VERSION

# 26

**TECHNOLOGY DOES NOT WAIT:  
ORDER VERSION 26  
TODAY**

Order today! Before its release date, any purchase of WINDEV 25, WEBDEV 25 or WINDEV Mobile 25 (excluding updates) as of 9/1/2020 entitles you to a free update (package and tutorials) to the corresponding version 26, as soon as available. Buying an update to version 26 before its release date and after 1/9/2020 enables you to get version 26 (package and manuals) for the difference in update price (excluding shipping costs). New 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 926 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. 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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# 26

## NEW FEATURES

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