



# Check out our new Magic xpa 4.7 version features



## Web Client

### Enhanced Context management

#### Re-initialization of the Context on Abnormal Termination

Magic xpa introduces an option to handle re-initialization of the context when it has terminated abnormally, making the product more robust.

#### Issuing Warning Message before Context Inactivity Timeout

Magic xpa introduces an environment setting to issue a warning message about the upcoming termination of a session due to inactivity timeout, allowing the end-user to resume work on time.

#### Closure of Active Web Application's Browser Tab

When you change the contents of a Web page and attempt to close it without saving the changed contents, Magic xpa raises a warning about the pending changes and allows the end-user to decide on the next action.

### Enhanced Magic format for input controls

#### Support for Blank 'Zero fill' Characters in Numeric Pictures

The Directive for Numeric pictures is supported with blank 'Zero fill' characters.

#### Support for Blank Date and Time

When Date or Time is zero, Date Picker or Time Picker will display it as blank respectively.

#### Customizable Date and Time Formats Defined on Magic xpa's Form

You can change Date and Time formats to be different than that defined on Magic xpa's Form.

### Enhanced Angular and JavaScript integration

#### CallJS() Supported in Web Client

Magic xpa now supports CallJS() function in Web Client tasks to let you call a JavaScript method of Magic Angular component.

#### Notification of Change in Custom Properties Property

A method named PropertyChanged() is introduced, which notifies you about a change in the value of the Custom Properties property in Magic xpa.

#### Support for Character-level Binding

Magic xpa now enables you to define the level of binding between Edit control and variables, either having the variable receive a control's value upon leaving the control, or on each character typed.

### Debugging

#### Performance debugging and Client-Side Logging

A new log level is introduced, logging the requests sent to server and their corresponding responses received from the server on to the browser console.

#### Debugging Client Side Error Messages

Magic xpa now identifies the runtime path of the error message that might appear in Client-side browser console while debugging Web Client applications, making it much easier to debug web client apps.

### Enhanced VS Code integration

#### Provision of Enum for Accessing Custom Properties

Magic xpa now provides Enum for Custom Properties so that you can access them easily.

#### Microsoft® Visual Code IntelliSense Enabled

Microsoft® Visual Studio Code now identifies the binding and shows the drop down box of IntelliSense.

### Support for Lazy Loading in Overlay Programs

You can now call Overlay programs from Load on Demand folder without Route





## Enhanced APG and Table relation definition

A new and robust APG (automatic program generator) utility is provided, allowing creation of browse programs quickly when a data source has relationships defined with other data sources, a relation can be defined between any data source and supports any type of relation (1:1, 1:n, n:1, n:n).

This is a substantial jumps-start for new programs and will assure correct links and range criteria.

## Expand & Collapse of Block Operations

In order to allow an easier look and understanding of Logic Units, Magic xpa now supports expanding (+) and collapsing (-) the Block operations in the Program Logic. This compliments the already existing expand/collapse of the Logic Units (handlers).

## Debugging: Variable Values Available in Tooltips

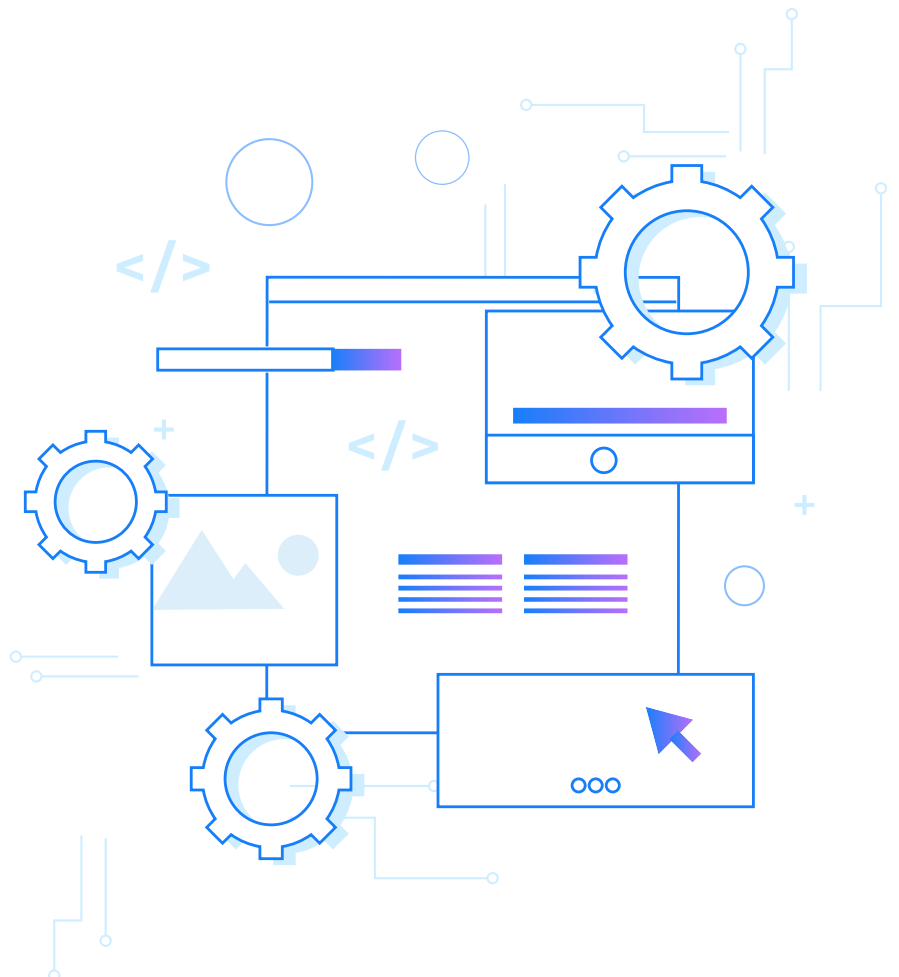
Magic xpa provides runtime values of the variables in the tooltips while debugging programs. This saves valuable time when debugging and assists in understanding the true value of an expression.

## Customizing Colors of Columns in Link Operations

Magic xpa enables the developer to customize the foreground and background colors of Columns in Link operations making the dataview definition of a task clearer.

## Automatic Installation of Visual Studio 2015 Shell

Magic xpa automatically installs Visual Studio 2015 Shell instead of the previously installed 2010 shell.





Magic xpa brings up a number of enhancements to enable you to work with Git version control effortlessly. As a part of our ongoing effort to comply with the CI-CD development methodology, we enhanced and improved our Git connectivity thereby making the development with Git seamless. Git is the most popular and widely used version control system in the world.

### Automatic Identification of Project under Git

Magic xpa identifies whether a project is under a Git repository or not.

### Automatic Identification of Change of Working Branch from Outside the Studio

If the working branch is changed from outside Magic xpa, it identifies the changed branch and loads the contents of the project repositories with the branch's name reflected in the Title bar.

### Implicit handling of source uniqueness

With previous versions, developers had to manually deal with configuring the development environment in order to ensure uniqueness of internal entities in the Magic xpa sources. This is now handled implicitly and an indication is provided in the GIT connectivity dialog.

### Prerequisites for Working with Git

You will find a new option named 'Git Connectivity' under the menu File > Version Control. On selecting this option Magic xpa will check for a list of prerequisites and provide an explanation and instructions on the next required step.

### Git Flow Commands

Magic xpa provides Git Flow commands as a recommended branching model. The Git Flow entries in the File > Version Control > Git Flow menu

### Logging Git Commands from Magic xpa

You can log the commands generated by Git from Magic xpa. A special flag named SpecialGITLog Is introduced in order to log them.

### Searching Program using Source File Name

Magic xpa enables you to find a desired program from the entire repository when you enter the program's source file name in Find Text dialog box. Magic xpa optimizes search by providing a checkbox named Search source file name only, which on clicking searches the text only in the source file name of the program.

**Note: When developing with Git, Magic's Compare and Merge tool is mandatory. The tool is external to Magic xpa installation. It is available at [downloads.magicsoftware.com](https://downloads.magicsoftware.com). The tool is licensed separately.**





## Mobile

### Android

ZBar SDK is no longer supported in Android. Barcode is not supported via Zbar and sample project has been modified to use Pic2Shop on Android.

### Android 10 Support

Magic xpa was tested and is compatible to work with Android 10. The project target SDK and compatibility libraries were upgraded to API 29.

### iOS

ZBar SDK is no longer supported in iOS. Barcode is not supported via Zbar and sample project has been modified to use Pic2Shop on iOS.



## Database

### Enhanced Support for MySQL ODBC Gateway

Magic xpa's MySQL ODBC gateway now supports MySQL 8.x.

### Binding Support in Oracle Database

You can now use the binding (~) option for statements that do not return a result set.

### Microsoft® SQL Server 2019 Support

Magic xpa was tested and is compatible to work with Microsoft SQL Server 2019.



## RIA

### Scaling of RIA Forms and Frames

Magic xpa now supports scaling of Forms, Frames, and Controls in rich client apps executing on desktops.

### Enhanced Scroll Bar

Rich client apps can now take advantage of the "Scroll Here" option in the contextmenu of the scroll bar in order to quickly and efficiently jump directly to a specific place in the task's data-view.



## Runtime

### New Event: Create Line Above

The developer and the end-user now have the option of creating a record above the currently positioned on record, in a table.



## General

### Support of HTML Format in Mail

In addition to Plain Text format, Magic xpa now enables you to send and receive mails in HTML format.

### Support for New Functions: FileOpenDlg and FileSaveDlg

Magic xpa introduces two new functions named FileOpenDlg and FileSaveDlg, thereby enabling you to upload and download the selected file(s) respectively.

### 32-bit/64-bit Open JDK with Magic xpa Installation

Magic xpa now provides 32-bit and 64-bit Open JDK version 1.8 along with the xpa installation relieving the developer with the need to deal with Java installations.

Visit us at:

<https://www.magicsoftware.com/app-development-platform/xpa>

