

# WaveMaker Version 5 Documentation

## Documentation Status

The software is slightly ahead of the documentation. WaveMaker is actively updating this documentation. At the moment we are updating the tutorials and the user guide. Comments and recommendations are appreciated. If you notice inaccuracies please comment or correct.

## Printing

You may print the documentation using the links provided in the upper left corner. If you print WaveMaker recommends you return to this Wiki often as the content is updated regularly.

## Contents

- [User's Guide](#)
- [Tutorials](#)

## WaveMaker 6.0

WaveMaker 6.0 is the current release.

In addition to this wiki documentation, see the [6.0 Release Notes](#) for WM6 specific changes.

Documentation for WM5 is very applicable to WM6. Documentation for WM4 is less applicable to WM6.

## WaveMaker 5.2

WaveMaker 5.2 is available as a hosted offering, see [www.wavemaker.com/cloud](http://www.wavemaker.com/cloud) for more information, or as a desktop offering, see the [www.wavemaker.com/download](http://www.wavemaker.com/download).

New features in WaveMaker 5.2:

- Resource Manager - Upload images, html, css, and JavaScript into your project using the **Resources** tab. Uploaded resources are available in Studio as bind targets for image sources, content, and more.
- Dojo 1.3.2
- IE 8 support
- New widgets withing Studio, tooled to enable user to include easily in their applications (beta features):
  - Dojo Chart
  - Dojo Menu
  - Dojo Grid
- Test Run - **Test Run** runs your application in debug mode. The application URL includes "?debug" and debugging options are enabled. **Run** is also available when you want to run your application without debugging.
- FireBug Lite integration - Provides integration with FireBug Lite, where available.
- Embedded HSQLDB deployment
- New deployment options
  - Deploy to EC2
  - Deploy to RightScale (upload WAR file to S3)
- REST Service improvements
  - REST post operations (in addition to get operations)
  - Multiple operations per service
- JOSSO Security (available in the Enterprise version only)

[More](#)

## ***New Features in WaveMaker 5.1***

- Improved Binding dialog
  - Better type matching in Simple mode, making valid bind targets obvious
  - Type validation icon - shows whether the type of the bind source and destination match
  - Expression builder in Expression mode
- Property Help System - we have documented the properties and events of each widget. You'll notice a "?" next to each property in the Property Inspector. Help content comes from the Wiki so you must have an internet connection to view help.
- Diagnostics tab - Click the **Source** button then the **Diagnostics** tab. You will see a diagnostics area that shows all bindings within the project.

## ***New Features in WaveMaker 5.0***

If you have used WaveMaker 4.0 in the past, this section outlines some of the new features available in WaveMaker 5.0. New features in WaveMaker 5.0 include:

- [Business Data Widgets](#) - drag data objects from the palette to automatically create grid and detail
- [Composite Widgets and Templates](#) - create your own widgets and template and publish to your palette
- [Accelerated data input of size values](#) - easily specify both width and height of each component.
- [Embedded Database](#) - Build projects with HSQLDB embedded. Easily share the project, including full data set, with others.

WaveMaker 4.0 users should be cognizant of migration issues described below, [Migrating 4.0.x Projects to 5.0.x](#)

### ***LiveView and LiveForm Improvements***

WaveMaker 5.0 includes a simplified mechanism for creating LiveForms and LiveViews. In most cases you will not need to create a LiveView to create a LiveForm. WaveMaker 5.0 makes it easy to create Forms that include related data, including both to-one and to-many relationships. See [Automatic Form Generation](#) for a description of the new functionality.

### ***Simplified sizing (aka Flex is Removed)***

Rather than flex, relative sizing is done using percentages (%). Similar to flex, percentage values entered in WaveMaker 5.0 are relative. If the values you enter do not add up to 100% the system calculates the relative values, utilizing 100% of the available space.

### ***Embedded Database***

Each project has a new directory, called data, under the webapproot directory. If you create an HSQLDB database, it will be put here. This makes it easy to embed a database within your project and should be a big help for sharing sample applications and examples within the WaveMaker community.

### ***New Keyboard Shortcuts***

See [WaveMaker 5.0 Keyboard Shortcuts](#) .

### ***Migrating 4.0.x Projects to 5.0.x***

WaveMaker 5.0 includes a migration facility that runs automatically when you open a project created with WaveMaker 4.0, creating a copy of the original project as a backup.

The **border**, **padding**, and **margin** styles may not upgrade automatically from 4.0.x projects into 5.0.x projects. To correct an updated project, adjust using the **Styles** properties (the **Styles** section of the Property Inspector) of the widget.

Widgets that used the **autosize** property will require manual adjustment. After the migration script has run view your pages and adjust the size of any widgets where the default size is not appropriate.

The upgrade script removes the "index.html" and "config.js" files from the webapproot directory of your project. These will be re-generated the next time you run. If you had made custom changes, you'll need to manually update the new files with those changes (as always, you can find the old version in the upgrade backup file).

Despite our best efforts, there are some known upgrade issues. If your projects aren't as you expect, be sure to check the logs for the following messages. In most of these cases, you'll need to restore your project from the backup, make some changes, and then re-open your project in studio so the upgrade can run again.

**line 24:9 no viable alternative at input '15'** - This indicates that something went wrong with parsing. In this case, the '15' indicates that there was a number where we didn't expect one. Old versions of studio (before 5) allowed numbers for widgets names, newer versions don't. You'll have to get the backed up version of your project, and edit the widgets files. Look for 15: as the widget name, and change it to \_15: (or something else entirely, just as long as it starts with a letter or an underscore). Note that you may need to update references to that, too.