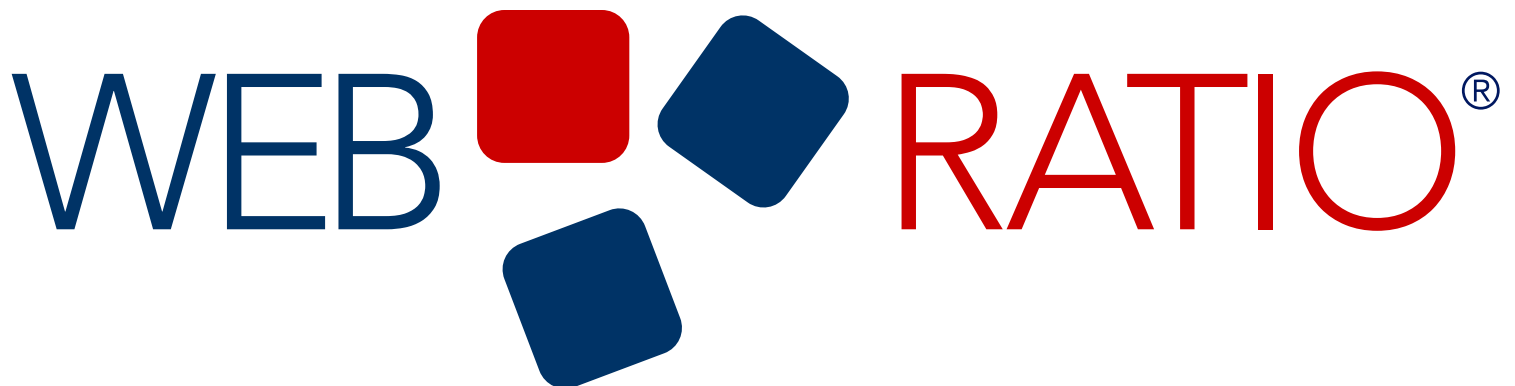
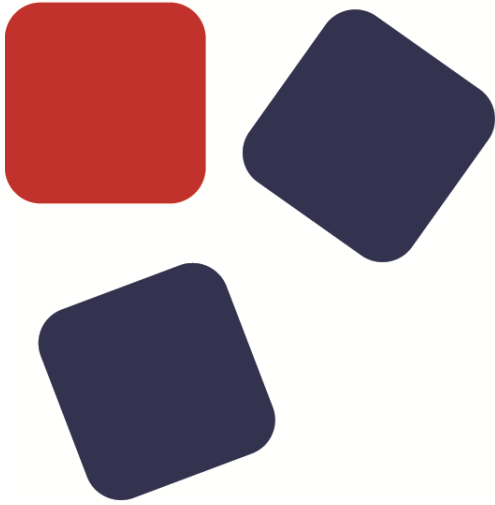


# 8.1 Mobile Platform Release Notes





# RELEASE NOTES

WEBRATIO MOBILE PLATFORM 8.1

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WebRatio s.r.l

P.le Cadorna, 10 – 20123 Milano ITALY

Tel. +39 02 3671 4280 – Fax +39 02 3671 4291

[www.webratio.com](http://www.webratio.com) – [contact@webratio.com](mailto:contact@webratio.com) – [webratio@pec.webratio.com](mailto:webratio@pec.webratio.com)



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### INTRODUCTION

WebRatio Mobile Platform is a powerful development environment that supports Business Users and IT Developers in building Mobile applications that can be installed on mobile phones and tablets. Your Mobile applications can work both offline, without the use of the internet connection, or online, synchronizing the information with an external system, which also can be developed with WebRatio Mobile Platform.

Let's see which the main functionalities of this product release are.



## PUSH NOTIFICATIONS

## PUSH NOTIFICATIONS

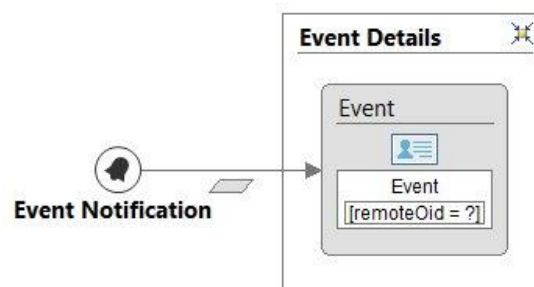
You can now enable your mobile application to receive Push Notifications and you can now enable your backend to send Push Notifications. A push notification is a message or alert delivered by a centralized server to an endpoint device. Push Notifications use the **Apple Push Notification Service (APNs)** to forwards notifications of third party applications to the Apple devices and **Google Cloud Messaging (GCM)** for Android to send data from your server to Android devices.

### Mobile Application

You can now add to your mobile application the chance to receive Push Notifications from an external server. You just need to add to your Mobile Project a "Notification Event" in order to state that the generated mobile app is enabled for Push Notifications.

The Notification Event means that your mobile application is listening for a push notification that is identified by the Notification Event name. You can specify on the Notification Event which is the structure of the push notification message, in order to be able to use the information contained in the notification inside the IFML model of the mobile application.

You can also model which is the mobile application behavior when a specific push notification is received and the user selects it, by drawing a navigation flow outgoing from the Notification Event. You can see an example in the following image.





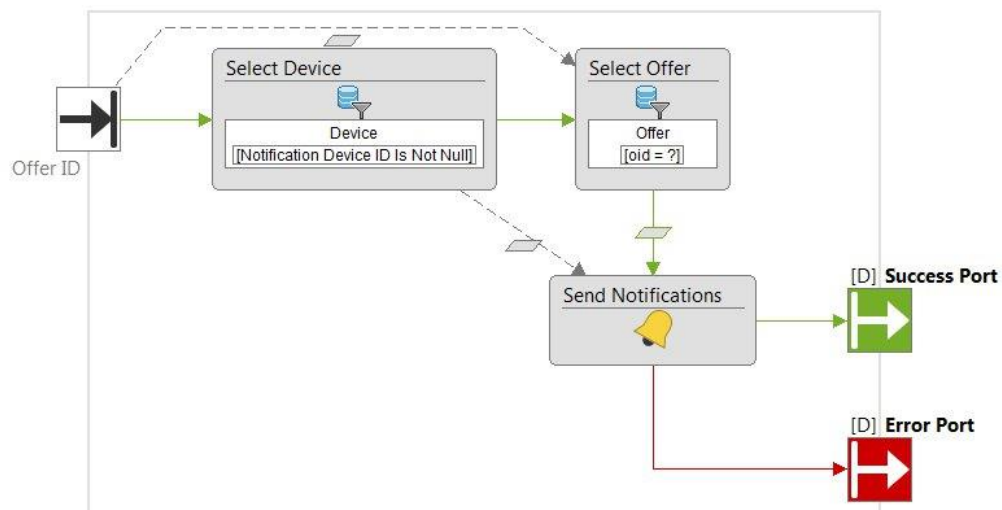
## Back-end Application

You can also enable your back-end to send Push Notification. You need to add one or more Notification Providers to your project, each one addressing a specific platform. Read the dedicated article on our knowledge base to learn how to configure a Notification Provider for iOS and for Android.



Apple Notification Provider [sdp2g]	
Id	Notification Provider sdp2g
Type	NotificationProvider
Name	Apple Notification Provider
Platform	iOS
API Key	
APNS Certificate	WEB-INF/descr/Development
APNS Certificate Passphrase	*****

You can then model an operation chain that sends Push Notifications to specific users of a specific mobile application. The operation dedicated to send Push Notifications through the Apple Push Notifications Service or Google Cloud Messaging Service is the "Send Notification". On this operation you can specify the structure of the notification message to be sent and the Notification Providers to be used. You can see a sample model in the following image.

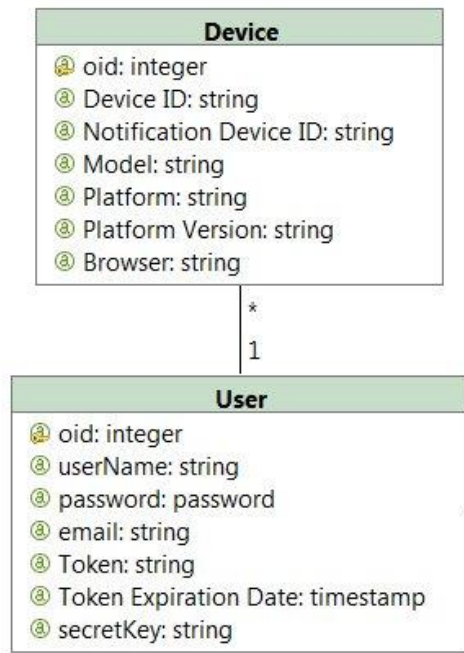


You can also select which are the users to be notified by using the dedicated "Device" class available in the Domain Model. This class stores information about the device on which the mobile application is installed and it is directly connected to the mobile application user. The device information are retrieved by the mobile application when the user logs in; in that moment the mobile



## PUSH NOTIFICATIONS

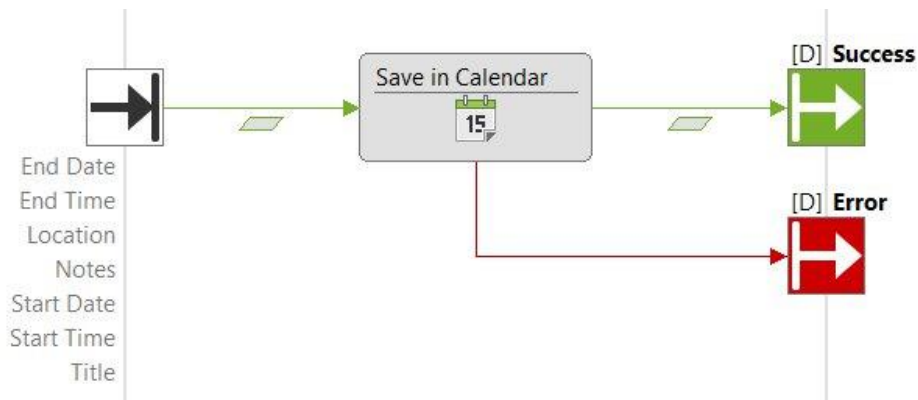
application sends a request to the login user service containing also information about the device platform, version and so on. You can see the new domain model section in the following image.





## NATIVE CALENDAR INTEGRATION

You can now add to the mobile application a feature allowing the user to save events, appointments, reminder and so on inside the device calendar, or just to open the native device calendar. You just need to use the dedicated “Calendar” operation in your Mobile Project, select the operating mode and pass to the operation all the information needed in order to save properly the item in the calendar. You can see a modeling example in the following image.



The behavior of the mobile application is to open up the device calendar showing to the user the form for creating a new event. The form is preloaded with the information you specified in the model and the user can decide whether to save the event or to cancel the operation. In both cases the user then goes back to your mobile application.

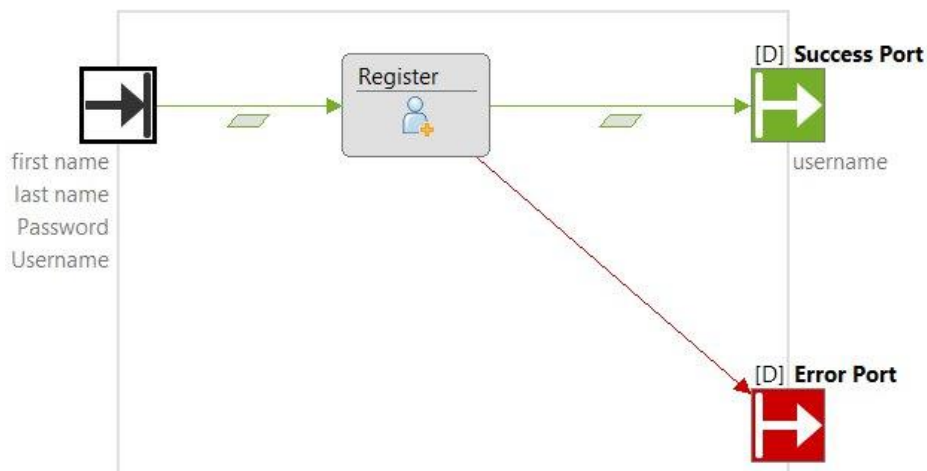
The screenshot shows a mobile application interface for creating a new calendar event. At the top, there is a header bar with a 'CANCEL' button (marked with an 'X') and a 'DONE' button (marked with a checkmark). Below the header, the email address 'android.webratio@gmail.com' is displayed twice. The event title 'BPM Seminar' is entered in a text field. Below the title, the location '1727-1799 S Indiana Ave' is entered. The event is scheduled from 'Fri, Apr 10, 2015' at '9:00 AM' to 'Wed, Apr 15, 2015' at '6:00 PM'. There is an 'ALL DAY' checkbox which is currently unchecked. At the bottom, the time zone is set to 'Central European Summer Time GMT+2' with a sun icon.

## USER REGISTRATION



## USER REGISTRATION

You can now model a user registration process in your mobile application using the dedicated “Register” operation available in the Mobile Project. The constraint is that your Mobile Project has a DataService project as dependency and that you published on the DataService project the “Register” User Service, which allows the user registration. In this way the “Register” operation is able to invoke the dedicated back-end service and save the user on the central database. You can see a model example in the following image.



## FIXED IN 8.1.3

- Fixed the runtime behavior for the Calendar View Component in Mobile Project. Now, the Data Flow having the Calendar Component as source propagates properly the data passed by the parameter binding.
- Improved the WADL generation for the "Create" service of a class, in order to make it compliant to the json format and properly manage the nodes of the association.
- Fixed the generation of the XSD section of the WADL generated from a Data Service Project. Now a unique definition is available for each published class of the Domain Model.
- Fixed the behavior for "Find Model Problem" command when launched on Mobile Projects containing back events placed in the main grid of the Layout View.
- The New Bundle key "notification.activityProgress" is now available in the "Localize" section of Mobile Projects in order to localize the message to be shown during the runtime loading process in mobile apps.
- Improved the emulator on PC for mobile apps. The "Reset Local Data" command, available in the "Settings" panel of the emulator, properly reset all the local data during the emulation of the mobile app.
- It's now possible to add custom input parameters on Restful Request Response Component in Mobile Projects.  
This operation can be accomplished by using placeholders in the "Endpoint URL" property such as {parameterName}. The previous syntax \${parameterName} is not valid anymore.



## FIXED IN 8.1.2

## FIXED IN 8.1.2

- The Rest Summary Page generated by a DataService Project now shows the complete response for a published "Create" service.
- Fixed WADL generated by a Data Service Project adding in the XSD structure all the information about the published associations.
- Fixed an issue on the mobile application that prevented a user from submitting a form having both validation rules applied and hidden fields.
- Fixed an issue that cause the dashboard to result empty after a page refresh.
- Added a control on the Send Notification operation that prevents the sending of a message with more than 256 characters to an iOS device because it is the limit of the message size that the device can receive.
- The "Reload from Project" command available in the Build Configurations dialog for DataService Projects now works properly even in the case in which the property in the model is empty.

## FIXED IN 8.1.1

- Fixed the behavior about the "Reset License Activation" command. Now it works properly.
- Fixed a problem on the mobile application that cause a screen change when tapping an email to switch to the device email app.
- Now the fields of a mobile application form remain visible when the keyboard is opened also on an iOS device with iOS 8.2 installed.
- Fixed the behavior about clearing a date field in mobile app using an Android 4.2 (or lower) device.
- Custom header elements of a Restful Request Response operation are now shown along with their dedicated icon when looking at the parameter binding dialog in a Mobile Project.
- Remove the iPhone 3G/3GS option from emulator device list since it is not compatible with iOS7, which is the minimum target platform.
- Fixed an issue that may cause the failure of the build process for an Android device mobile application
- Copy and Paste command now correctly preserve also all bindings done on navigation and data flows contained in the copied model. Fixed both in Mobile Projects and DataService Projects.
- Fixed the runtime behavior for Selection Fields belonging to Form Component in Mobile Projects. A Selection Field is now properly preloaded with selected value if the "Split Output" property is checked in its Properties View.
- Fixed the runtime behavior for Selector Component that preloads a Selection Field belonging to Form Component in a Screen in Mobile Projects. The Selector Component now works properly when posting the Form and returning in the Screen.
- The App Version field in the Build Configuration dialog of mobile project now checks that the provided value is composed of 3 numbers separated with the '.' character.
- The Layout View now shows the proper icon for all layout events in the pool.
- Fixed the behavior about cutting and pasting Navigation Flows outgoing from the error port of Actions placed in the App View of a Mobile Project.



## FIXED IN 8.1.1

- When the user taps the back button just after the login, the mobile application now is properly closed.
- Fixed the behavior about pressing the "Show Layout XML ..." when a Main Grid containing the Home event is selected in the Layout view.
- The WebRatio Add-on accessible directly from the tool, now automatically authenticates the user with the credentials used for the product activation.
- Improved the algorithm concerning the synchronization between mobile apps and the corresponding back-end.
- Fixed the runtime behavior concerning the execution flow in case of error occurred on a RestFul Request Response component in Mobile Apps.
- Improved the runtime behavior for Mobile Apps concerning the wrong data preservation for propagation on Navigation Flows connecting two different screens.
- The mobile application synchronization algorithm now handles correctly data having 0 as value for the remote primary key.
- Improved the performances of the synchronization algorithm used by the mobile application at startup. Files starts to be downloaded asynchronously just after the main data have been saved. The user can then see the first screen while the application is still downloading the remaining files.
- Fixed an issue that prevented files to be downloaded and saved correctly on Android 4.1.1 devices.
- Fixed the mobile application runtime so that now it is able to evaluate correctly conditions applied on components having many elements in input.
- The Compare Validation Rule available on Mobile Project now it is not triggered when the related field is empty.
- The Compare Validation Rule available in Mobile Project does not give error anymore when used with a constant value for the comparison.

### FIXED IN 8.1.0

- The "Service Data Providers" section of the Build Configuration dialog for Data Service projects now enables/disables properties when applicable.
- The "Component Conversion" dialog shown in a Mobile Project now reports the correct components names, without the [Mobile] suffix.
- Fixed an issue that caused in some cases the mobile application to show a strange effect moving from a screen to another one.
- Fixed an issue that prevented the Mobile Application from opening properly files downloaded from the back-end server.
- Now a screen containing a form correctly scrolls also for Mobile Applications working on an Android 4.1 device. When the user opens the keyboard to fill in a field, the screen scrolls to let the field remain visible
- Fixed the scroll of screens for a Mobile Application working on an Android 4.1 device. The scroll does not freeze anymore once opened the keyboard for filling a field.
- It is now available the "Push Notifications" section in the Emulator for simulating the receive of push notifications by the Mobile Application.
- The users/login back-end service now includes in the request message some information related to the device on which the mobile application is running. These information include the Notification Device ID, the device Platform and Version, the used Browser.
- The dashboard showing the result of the Mobile Project build process now contains a QRCode also for iOS builds.
- Fixed an issue of the mobile application that caused a freeze while taking a picture.
- "License Information" and "Reset License" dialogs now show the proper edition "WebRatio Mobile Platform Community Edition".
- The custom headers modeled on a Response Operation in a DataService project now are listed inside the 'Access-Control-Expose-Headers' header. In this way all the custom headers can be accessed by browsers.
- In a Mobile Application the login now works even if no back-end is used. The logged in user is stored in the App User table. All other user information can be updated using the proper operation.





## OLDER RELEASES

- In the "Settings" section of the Emulator are now available the "Reset Account Manager" button and the "Reset Local Data" button which allow to reset the mobile application to the initial state by emptying the information from the account manager and from the local database.
- It's now possible to state that the Update operation has to perform updates on multiple objects at the same time, both in Mobile and DataService projects. The "Bulk" property is now available in the Properties View for this purpose.
- The Emulator Console now logs also the INFO level information for a mobile application.
- Fixed an issue that silently changed the layout model of a screen in Mobile Project when selecting a custom location to see or edit its content.
- IT's now possible to add custom header to a REST web service invocation in a Mobile Project. The "Request Header" option and the "Response Header" option are now available in the contextual menu of a Restful Request Response operation.

## OLDER RELEASES

Here you can find the release notes of previous WebRatio Mobile Platform releases:

- [WebRatio Mobile Platform 8.0 Release Notes](#)

## SYSTEM REQUIREMENTS

### WebRatio Development Platform

#### Operating System

- Microsoft Windows Vista or higher, 64 bit
- Linux, 64 bit
- Mac OSX 10.7 (Lion) or higher, 64 bit

Installing WebRatio Development Platform also requires:

- Disk Space: 600 MB
- RAM: 4 GB minimum, suggested is 8 GB

#### Java

When running WebRatio Development Platform on a computer you will need the Java Runtime Environment (JRE) 1.7 or higher.

You can download JDKs here:

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

### WebRatio Generated Server Applications

#### Application Server

When running WebRatio Generated Server Applications on a server you will need a Java Application Server compatible with Servlet 3.0 and JSP 2.2.

#### Java

When running WebRatio Generated Server Applications on a server you will need the Java Runtime Environment (JRE) 1.6 or higher.

You can download JDKs here:

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

### WebRatio Generated Mobile Applications

The Mobile Apps generated with WebRatio Mobile Platform are compatible with:

- Android 4.0.3 or higher
- iOS 7 or higher

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WebRatio srl  
@ Como NExT  
Science and Technology Park  
Via Cavour, 2 – Lomazzo (Como) – ITALY  
[www.webratio.com](http://www.webratio.com)