

webMethods Mobile Suite 9.12 Readme

October 2016

This file contains important information you must read before using webMethods Mobile Suite 9.12. You can find system requirements, user documentation, and installation and upgrade instructions on the [Documentation website](#) or the [TECHcommunity website](#). At those locations, you can also find suite-related security and globalization information.

Included in this file is information about functionality that has been added, removed, deprecated, or changed for this product. Deprecated functionality continues to work and is supported by Software AG, but may be removed in a future release. Software AG recommends against using deprecated functionality in new projects.

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1.0 Critical Information

This section lists any critical issues for the current release that were known when this readme was published. For critical information found later, go to the Knowledge Center on the [Empower website](#).

Mobile Designer

MOBILE-2586

Codesign fails when packaging iOS app for App Store build using Mobile Administrator.

When doing App Store release builds on Mobile Administrator build nodes running Mac OS X 10.10+, the build job might fail with the following error message:

```
> /usr/bin/codesign --force --preserve-metadata=identifier,entitlements,resource-rules --sign [...]
--resource-rules=/var/folders/[...].app/ResourceRules.plist --entitlements [...]
failed with error 1. Output: Warning: usage of --preserve-metadata with option "resource-rules"
```

(deprecated in Mac OS X >= 10.10)!

This is related to a bug in Xcode command line tools used to build and package the app. There are two known workarounds to address this issue. First, for App Store builds you can use Multibuild locally, second is to remove the "--resource-rules=\$destApp/ResourceRules.plist" argument for *codesign*, in `./Xcode.app/Contents/Developer/Platforms/iPhoneOS.platform/Developer/usr/bin/PackageApplication`

Please contact support in case you experience any related problems.

2.0 Known Issues

This section lists any issues for the current release that were known when this readme was published. For known issues found later, go to the Knowledge Center on the [Empower website](#).

Mobile Designer

- MOBILE-2552
Info.plist contains invalid key: CFBundleResourceSpecification.
When building and packaging iOS apps, there might be warnings/errors depending on Mac OS X and Xcode versions being used related to CFBundleResourceSpecification key in Info.plist. As workaround do local Multibuild and fix the setting manually in Xcode.
- MOBILE-2570
ClassCastException in TabViews on iOS.
After registering ITabListener, a ClassCastException might be thrown on tab selection. There is currently no workaround.
- MOBILE-2572
ClassCastException in TabViews on Android.
ActionBarItemView to android.view.ViewGroup ClassCastException might happen in some setups. There is currently no workaround.

Mobile Development

- MOBILE-2545
ListViews will not show in TabViews view property.
It is not possible to select a ListView in the new TabView's view property. Only Views and WebViews can be selected. As workaround the AML source file must be edited.
- MOBILE-2545
isRunningOnTablet() returns true for iPhone6+.
`com.softwareag.mobile.runtime.toolkit.util.AppUtility.isRunningOnTablet()` does return true on an iPhone6+. Make sure to check for iPhone6+ separately.
- MOBILE-2578
Wrong validation messages for TabViews.
In some cases Outline Editor will provide wrong validation messages.

3.0 Usage Notes

This section provides any additional information you need to work with the current release of this product.

- With `nUITabView` a new type of control (or better a new type of view) was introduced. A `TabView` provides a high level navigation pattern, where a user may switch between different Subviews using a swipe gesture or by selecting Tabs representing each of the subviews. A tab can contain a label or an icon to describe the Tab's content. `nUITabView` itself is a subclass of `nUIViewControllerAnimated` and can be used in the same way as a regular `nUIViewControllerAnimated`. Outline Editor does support `TabViews` and `Tabs` including all properties.
- In Outline Editor we are introducing Styles. A Style allows the grouping of UI properties and its values in reusable elements. Now each UI element in your AML Outline can be assigned one Style element, enabling inheritance of all property values defined in the Style of the UI element. By changing values in the UI element, the according property of the Style will be overwritten for the particular UI element. Create new custom Styles in the new `UserInterface > Styles` category. As special type of Style, `ApplicationStyle` offers an advanced capability to define Themes for your Android project. Please refer to the documentation for more information. With Styles it is now also possible to define and reference custom Colors, Sizes and Font Sizes.
- EML (Entity Modeling Language) for defining custom data models and classes, does now support operations and opposite references. Use opposite references for cross references of 2 entities. Operations provide a way for adding dynamic properties to EML entities. This is useful if you need to determine the properties value at runtime.
- For `nUIObjects` the new property "tag" has been added. Tags simply contain some context information about the `nUIObject` instance to be used for example in callbacks and delegates. Of course users can access Tags in `nUIObject` API from the Outline Editor.
- A new way of accessing Mobile Designer sample apps was added. By using an Example Wizard, the new ARIS Picture 2 Model sample app can be added into the current workspace. To add the new sample app select the `File > New > Example` menu item from the Software AG Designer main menu. This opens a new dialog and wizard to select the sample app and to configure available settings. ARIS Picture 2 Model highlights ARIS API integration, data modeling using EML, camera integration and advanced native code injection for iOS, Android and Phoney.
- In the Outline Editor two new UI Templates were added for most frequent List View templates.
- The Outline Editor now supports new union type "DP" to represent density independent pixels for dimensional properties, like "x", "y", "innerX", "innerY". A DP represents a virtual pixel unit to express dimensions or position in a density-independent way. In addition to specify DP values in the Outline Editor, you can also use DP programmatically to set dimensions or position via new `com.softwareag.mobile.runtime.toolkit.util.AppUtility.convertDpToPixel(int)`.
- A new API was introduced for setting background on all `nUIDisplayObjects` via the new `IBackgroundDrawable` interface.

- To store sensitive data securely on the device, such as usernames, passwords, settings, etc. a new API was added in `com.softwareag.mobile.md.io`, along with a sample application to demonstrate its use. The new sample app `_NativeUICredentialStore_` can be found in the Mobile Designer Samples directory.
- A new permissions API was introduced. Use `com.softwareag.mobile.md.permissions.*` to check for permissions of the app at runtime, including access to camera, location, etc.
- On iOS, to close the keyboard in all releases prior to 9.12 a "Cancel" dismiss button was displayed in the top left corner instead of the back button to close the keyboard. This behavior of the native UI runtime now changed to close the keyboard automatically as common to iOS runtime. No dismiss button will be shown anymore.
- Deprecated MDM related features of Mobile Administrator have been removed.

4.0 Fixes Included in Each Release

This section lists the latest fix level that has been included in each release for each product component. A release is listed in this section only if changes occurred in that release. Go to the Knowledge Center on the [Empower website](#) for detailed information about fixes.

Mobile Designer

Release 9.10

- WWW_9.10_MobileDesigner_Fix1

Mobile Development

Release 9.10

- WWG_9.10_MobileDevelopment_Fix1

5.0 Other Resolved Issues

This section lists the issues that were resolved in each release but were not part of the fixes listed in the previous section. A release is listed in this section only if changes occurred in that release.

Mobile Designer

Release 9.12

- MOBILE-2507
WebView requests were executed twice on iOS.
When loading an URL in a WebView, the request was executed twice. The issue has now been

resolved.

Mobile Development

Release 9.12

All released with WWG_9.10_MobileDevelopment_Fix1.

6.0 Documentation Changes

This section describes significant changes to the documentation, such as the addition, relocation, or removal of product guides, online help, chapters, or other major content. A release is listed in this section only if changes occurred in that release.

Mobile Designer

Release 9.12

- The documentation has been updated.

Mobile Development

Release 9.12

- The documentation has been updated.

7.0 Added, Removed, Deprecated, or Changed Parameters

A release is listed in this section only if changes occurred in that release.

Release 9.12

Mobile Designer

| Deprecated Parameter | Replacement, if any |
|---|---------------------|
| mobiledesigner.runtime.core.class.sound | |

8.0 Added, Removed, Deprecated, or Changed APIs

A release is listed in this section only if changes occurred in that release.

Release 9.12

Mobile Designer

| Added API | Description |
|---|--|
| com.softwareag.mobile.runtime.nui.nUITabView | New nUITabView API to create and manage tab views and its tabs. |
| com.softwareag.mobile.runtime.nui.nUITabElement | |
| <i>com.softwareag.mobile.runtime.nui.ITabViewListener</i> | |
| <i>com.softwareag.mobile.runtime.nui.ITabViewProvider</i> | |
| com.softwareag.mobile.md.imagetools.ImageScaler | New API for much improved image scaling. |
| com.softwareag.mobile.md.io.Credentials | New security API to securely store credentials and make use of isolated storage |
| <i>com.softwareag.mobile.md.io.ICredentialStorage</i> | |
| com.softwareag.mobile.md.io.CredentialStore | |
| <i>com.softwareag.mobile.md.io.IsolatedKeyValueStore</i> | |
| <i>com.softwareag.mobile.runtime.nui.background.IBackgroundDrawable</i> | New API to customize backgrounds for nUIDisplayObjects |
| com.softwareag.mobile.runtime.nui.background.PatternImage | |
| com.softwareag.mobile.runtime.nui.background.ColorBackground | |
| com.softwareag.mobile.runtime.nui.background.PatternImage | |
| <i>com.softwareag.mobile.md.permissions.IPermissionsCallback</i> | New API to check for runtime permissions of the app |
| com.softwareag.mobile.md.permissions.PermissionsManager | |
| com.softwareag.mobile.runtime.nui.nUIConstants | Added new events used by nUIDatePicker. |
| nUIConstants.EVT_PICKER_OK | |
| nUIConstants.EVT_PICKER_CANCEL | |
| com.softwareag.mobile.runtime.nui.nUIDisplayObject | Added new method to nUIDisplayObject to notify the object when being removed from super view |
| public void onRemoved() | |
| com.softwareag.mobile.runtime.comms.HttpConnectionHandler | Added url decoding to HttpConnectionHandler |
| public String urlDecode(final String url) | |

| Added API | Description |
|---|---|
| <p>com.softwareag.mobile.runtime.nui.nUIViewDisplay</p> <p>public void syncUI()</p> | <p>Added method to nUIViewDisplay to trigger view synchronization and updating.</p> |
| <p>com.softwareag.mobile.runtime.nui.nUIObject</p> <p>public void setTag(final Object tag)</p> <p>public Object getTag()</p> | <p>Added tags to nUIObjects to store context information about the control</p> |
| <p>com.softwareag.mobile.runtime.nui.nUIObject</p> <p>boolean checkFlags(final int flags)</p> <p>boolean checkAndClearFlags(final int flags)</p> <p>int getFlags()</p> <p>void setFlags(final int flags)</p> <p>void clearFlags(final int flags)</p> <p>void orFlags(final int flags)</p> | |
| Deprecated API | Replacement, if any |
| <p>com.softwareag.mobile.runtime.nui.nUIObject.update_flags</p> | <p>Will be private. Use new nUIObject API.</p> |
| <p>Nokia UI (com.nokia.*) API compatibility.</p> | <p>Migrate to MIDP 2.0 API.</p> |
| <p>VSCL (com.vodafone.v10.*) API compatibility.</p> | <p>Migrate to MIDP 2.0 API.</p> |
| <p>Samsung APIs (com.samsung.util.*)</p> | <p>Migrate to MIDP 2.0 API.</p> |
| <p>Sprint APIs (com.sprintpcs.media.* and com.sprintpcs.util.*)</p> | <p>Migrate to MIDP 2.0 API.</p> |
| <p>OpenGL/ES APIs in javax.microedition.khronos.* and runtime branches</p> | |
| <p>JSR 75 File Connection classes - javax.microedition.io.file.*</p> | <p>New API will be available in 10.x</p> |
| <p>Mobile3D and Micro3D - javax.microedition.m3g.* and com.mascotcapsule.micro3d.v3.* resp.</p> | |
| <p>Support for original WMA 1.0 runtime and APIs.</p> | <p>Use WMA 2.0.5 runtime and APIs instead.</p> |
| <p>Support for LCDUI Forms - specifically javax.microedition.lcdui.Alert, AlertType, Choice, ChoiceElement, ChoiceGroup, CustomItem, DateField, Form, Gauge, ImageItem, Item, ItemCommandListener, ItemStateListener, List, Screen, Spacer, StringItem, TextBox, TextField, TextInterface, Ticker</p> | <p>Use NativeUI API instead</p> |

| Added API | Description |
|---|---|
| Support for CLDC 1.0 only APIs and runtime branches | Migrate to CLDC 1.1 API |
| Support for MIDP 1.0 only APIs and runtime branches | Migrate to MIDP 2.0 API |
| BlackBerry APIs in net.rim.blackberry.*, net.rim.device.*, net.rim.tid.*, net.rim.vm.* and runtime branches | Migrate to MIDP2.0 / CLDC 1.1 and JSR 135 |

Mobile Development

| Added API | Description |
|--|---|
| com.softwareag.mobile.runtime.toolkit.ui.styles.Style | New API to create new Styles and apply to nUIDisplayObjects |
| com.softwareag.mobile.runtime.toolkit.util.AppUtility int convertDpToPixel(final int dp) | Added helper method for dp conversion to AppUtility class |

| Deprecated API | Replacement, if any |
|--|---------------------|
| com.softwareag.mobile.runtime.toolkit.ui.controller.AbstractViewController boolean setVisible(final nUIObject object, final boolean isVisible) boolean void forceHide(final nUIObject object) | |

9.0 Copyright Information

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10.0 Support

Visit the [Empower website](#) to learn about support policies and critical alerts, read technical articles and papers, download products and fixes, submit feature/enhancement requests, and more.

Visit the [TECHcommunity website](#) to access additional articles, demos, and tutorials, technical information, samples, useful resources, online discussion forums, and more.

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