

Oracle® Retail Store Inventory Management
Mobile Application Framework (MAF) Installation Guide
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Oracle Retail Store Inventory Management Mobile Application Framework (MAF) Installation Guide, Release 16.0.3

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Primary Author: Bernadette Goodman

Contributors: Bipin Pradhan, Malathesh Jadiyavara Lingappa

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- (ii) the **Wavelink** component developed and licensed by Wavelink Corporation (Wavelink) of Kirkland, Washington, to Oracle and imbedded in Oracle Retail Mobile Store Inventory Management.
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Oracle Retail Store Inventory Management Mobile Application Framework (MAF)
Installation Guide, Release 16.0.3

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- Do you need different information or graphics? If so, where, and in what format?
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Preface

This Installation Guide describes the requirements and procedures to install this Oracle Retail Store Inventory Management (SIM) Mobile release.

Audience

This Installation Guide is written for administrators who help push Oracle Retail SIM Mobile to the App Store.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at

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Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit

<http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit

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Related Documents

For more information, see the following documents in the Oracle Retail Store Inventory Management Release 16.0.3 documentation set:

- *Oracle Retail Store Inventory Management Batch Operations Guide*
- *Oracle Retail Store Inventory Management Configuration Guide*
- *Oracle Retail Store Inventory Management Installation Guide*
- *Oracle Retail Store Inventory Management Integration Guide*
- *Oracle Retail Store Inventory Management Release Notes*
- *Oracle Retail Store Inventory Management Store User Guide*
- *Oracle Retail Store Inventory Management Data Model*

Customer Support

To contact Oracle Customer Support, access My Oracle Support at the following URL:

<https://support.oracle.com>

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Review Patch Documentation

When you install the application for the first time, you install either a base release (for example, 16.0) or a later patch release (for example, 16.0.3). If you are installing the base release or additional patch releases, read the documentation for all releases that have occurred since the base release before you begin installation. Documentation for patch releases can contain critical information related to the base release, as well as information about code changes since the base release.

Improved Process for Oracle Retail Documentation Corrections

To more quickly address critical corrections to Oracle Retail documentation content, Oracle Retail documentation may be republished whenever a critical correction is needed. For critical corrections, the republication of an Oracle Retail document may at times not be attached to a numbered software release; instead, the Oracle Retail document will simply be replaced on the Oracle Help Center (docs.oracle.com) Web site, or, in the case of Data Models, to the applicable My Oracle Support Documentation container where they reside.

This process will prevent delays in making critical corrections available to customers. For the customer, it means that before you begin installation, you must verify that you have the most recent version of the Oracle Retail documentation set. Oracle Retail documentation is available on the Oracle Help Center (docs.oracle.com) at the following URL:

<https://docs.oracle.com/en/industries/retail/index.html>

An updated version of the applicable Oracle Retail document is indicated by Oracle part number, as well as print date (month and year). An updated version uses the same part number, with a higher-numbered suffix. For example, part number E123456-02 is an updated version of a document with part number E123456-01.

If a more recent version of a document is available, that version supersedes all previous versions.

Oracle Retail Documentation on the Oracle Help Center (docs.oracle.com)

Oracle Retail product documentation is available on the following web site:

<https://docs.oracle.com/en/industries/retail/index.html>

(Data Model documents can be obtained through My Oracle Support.)

Conventions

Navigate: This is a navigate statement. It tells you how to get to the start of the procedure and ends with a screen shot of the starting point and the statement “the Window Name window opens.”

This is a code sample

```
It is used to display examples of code
```

Preinstallation Tasks

Technical Concepts

The installer should understand the following technical concepts:

- JDeveloper 12.2.1.3
- Application servers
- XML manipulation
- Apple Enterprise Development setup and deployment
- Certificate creation and deployment

Technical Specifications

Runtime Support and Certification Matrix

Mobile Operating System	Version	Supported Devices
Android	9.x	<ul style="list-style-type: none"> ▪ Any device running Android 9.0 or above with Minimum 1 GHz processor / 1 GHz Dual Core or better (Recommended) and at least 1 GB of total RAM.
Android	8.x	<ul style="list-style-type: none"> ▪ Any device running Android 8.0 or above with Minimum 1 GHz processor / 1 GHz Dual Core or better (Recommended) and at least 1 GB of total RAM.
Android	7.x	<ul style="list-style-type: none"> ▪ Any device running Android 7.0 or above with Minimum 1 GHz processor / 1 GHz Dual Core or better (Recommended) and at least 1 GB of total RAM.
Android	6.x	<ul style="list-style-type: none"> ▪ Any device running Android 6.0 or above with Minimum 1 GHz processor / 1 GHz Dual Core or better (Recommended) and at least 1 GB of total RAM.
iOS	12.x	<ul style="list-style-type: none"> ▪ All devices.
iOS	11.x	<ul style="list-style-type: none"> ▪ All devices.
Windows	10	<ul style="list-style-type: none"> ▪ Any tablet or desktop running Windows 10 Version 1511 (November 2015 release) or later, with Intel processor. <p>Note: Only side-loading is supported. MAF apps cannot be uploaded to the Windows Store.</p>

For more information on build time support, see the Oracle Mobile Application Framework certification matrix at: <https://www.oracle.com/technetwork/developer-tools/maf/documentation/261certificationmatrix-5676408.html>

Installing and Setting up the Application

This chapter describes how to install and configure JDeveloper and SIM Mobile for iOS, Android, and Windows 10 deployment.

Prerequisites

Apple iOS

Deploying SIM Mobile for use on an iOS device requires that you have a computer running Mac OS X set up for iOS development. For more information on the setup, including provisioning profiles and certificates, see Apple's documentation at <https://developer.apple.com/>. Additionally, you must have installed JDeveloper, Xcode and Oracle MAF extension. For more information, see their respective documentations.

Android

Deploying SIM Mobile for use on an Android device requires that you have a computer that has the Android SDK installed. For more information on the setup, as well as version compatibility, see Oracle Mobile Application Framework documentation: <https://docs.oracle.com/middleware/maf250/mobile/install/installing-mobile-application-framework-jdeveloper.htm#MAFIG24926>

Windows 10

Deploying SIM Mobile for use onto a Windows 10 personal computer or tablet requires that your computer has Microsoft Visual Studio installed. For more information on the setup, see Oracle Mobile Application Framework documentation: <https://docs.oracle.com/middleware/maf250/mobile/install/installing-mobile-application-framework-jdeveloper.htm#MAFIG24926>

Installer Artifacts

File	Contents
maf-2.6.1.zip	This is the MAF extension that must be installed in JDeveloper (see "Installing the MAF Extension" below). It can be downloaded here . https://download.oracle.com/otn-pub/jdeveloper/12.2.1.3.0/extensions/maf-2.6100.20191020-0146.zip
SimMobileArchive.maa	The main application archive. (Required to install or customize SIM Mobile) available in the SIM installer download.

Installing the MAF Extension

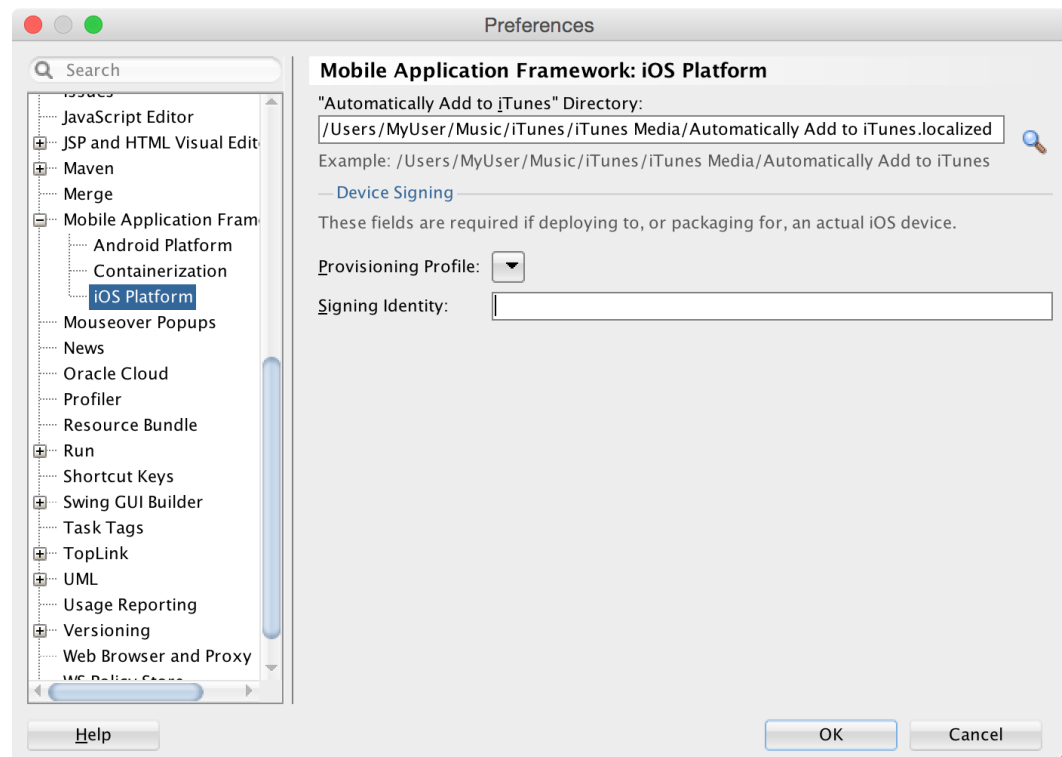
To install the MAF extension on already installed JDeveloper, see [Installing Mobile Application Framework with JDeveloper](#).

When you reach “Installing the MAF Extension in JDeveloper” step 2, click the “Install from Local File” radio button and then locate and select the maf-2.6.1.zip (from “Installer artifacts” above). Then skip to step 6.

Configuring JDeveloper for iOS Deployment

Configure JDeveloper using the following steps:

1. Launch JDeveloper.
2. Open the **Preferences** dialog from the JDeveloper menu.
3. Scroll down to **Mobile Application Framework** and expand it.
4. Select **iOS Platform**.
5. In the first box, use the browse button to select the **Automatically Add to iTunes directory**.
6. Select the **Provisioning Profile** from the drop-down list.
7. Enter the name of the signing identity corresponding to your development certificate.



For more details on configuring JDeveloper to deploy to an iOS device, see *Oracle Mobile Application Framework Installing Oracle Mobile Application Framework 2.3.2* documentation.

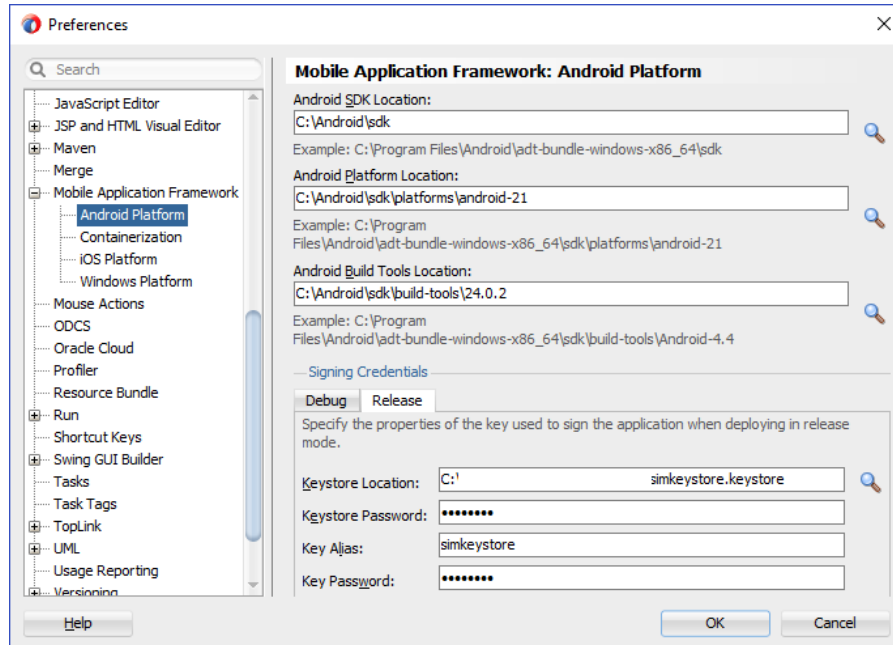
Note: Customers must use their own provisioning profile and signing identity to distribute the application.

Configuring JDeveloper for Android Deployment

Configure JDeveloper using the following steps:

1. Launch JDeveloper.
2. Open the **Preferences** dialog from the JDeveloper menu.

3. Scroll down to **Mobile Application Framework** and expand it.
4. Select **Android Platform**.



5. In the first box, use the browse button to select the installation directory of the Android SDK.
6. In the second box, use the browse button to select the installation directory of the Android Platform.
7. In the third box, use the browse button to select the installation directory of the Android Build Tools.
8. Select either **Build** or **Release** inside the **Signing Credentials** section.

Note: For performance reasons it is recommended to use **Release** unless the intent is to debug the application.
9. For **Debug**, input the debug keystore key and password in the entry field.
10. For **Release**, use the first box in this section to point to your keystore.
11. Use the remaining boxes for entry of your keystore information.
12. For more information on Oracle MAF Android installation, see the Oracle Mobile Application Framework documentation at:

<https://docs.oracle.com/middleware/maf250/mobile/install/installing-mobile-application-framework-jdeveloper.htm#MAFIG24926>

Configuring JDeveloper for Windows 10 Deployment

Configure JDeveloper using the following steps:

1. Launch JDeveloper.
2. Open the **Preferences** dialog from the JDeveloper menu.
3. Scroll down to **Mobile Application Framework** and expand it.
4. Select **Windows Platform**.
5. In the first box, use the browse button to select the installation directory of the Windows SDK (installed with Visual Studio).
6. Select either **Build** or **Release** inside the **Signing Credentials** section.

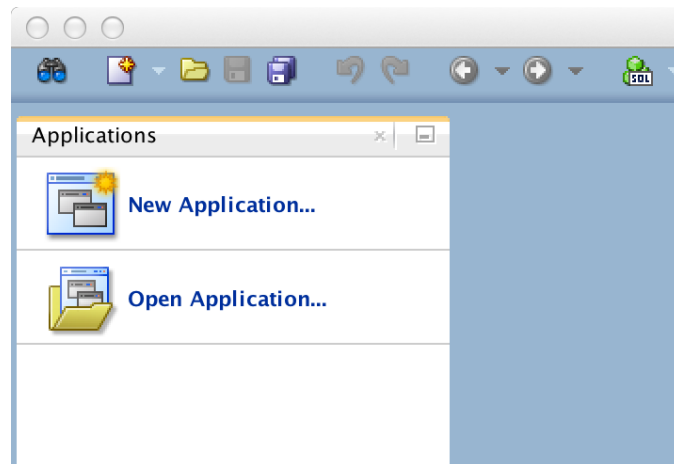
Note: For performance reasons it is recommended to use **Release** unless the intent is to debug the application.

7. Use the entry boxes in this section to point to your certificate and input the certificate password.
8. For more information on Oracle MAF Android installation, see the Oracle Mobile Application Framework documentation at:
<https://docs.oracle.com/middleware/maf250/mobile/install/installing-mobile-application-framework-jdeveloper.htm#MAFIG24926>

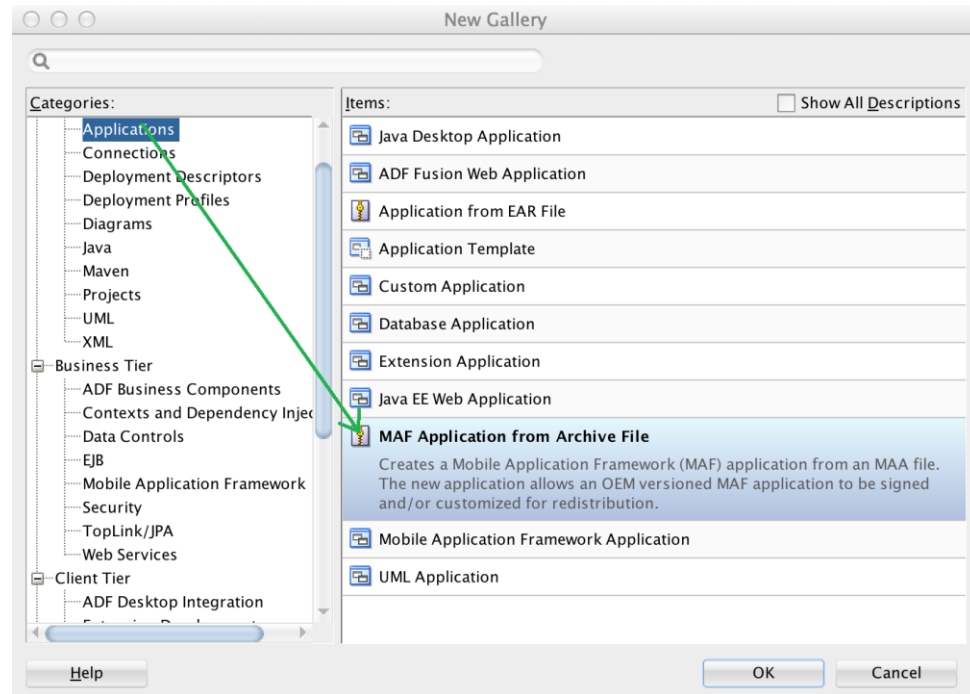
Creating a Workspace from the Archive

When you launch JDeveloper for the first time, you will encounter an empty workspace. The first thing that must be done is to create a new application from the provided .maa file. Use the steps that follow:

1. Open the **New Application** dialog (or open the general **New** dialog and select **Applications**).



2. Select **MAF Application from Archive File** and click **OK**.



3. In the wizard that opens, select the .maa file you want to create a custom application from (the main SIM Mobile app is packaged as SimMobileArchive.maa). For instructions on how to retrieve SimMobileArchive.maa, see section [Installer Artifacts](#).
4. Enter a name for your application.
5. You can also change where the application will be saved (by default, <workspace>/<application name>).
6. On the Location page, enter the location information, for example:
 - MAA file : /Users/Myuser/Desktop/SimMobileArchive.maa
 - Application file : SimMobileCustom
 - Directory: /Users/Myuser/jDeveloper/mywork/SimMobileCustom
7. Click **Finish** when you have entered the necessary information.

Configuring Application Settings

For instructions on how to configure settings such as service connections, see *Configuring the Application Section* in the *Oracle Retail Store Inventory Management MAF Guide*.

Configuring Application for iOS Deployment

To configure SIM Mobile for iOS deployment, use the following steps:

1. Open the workspace created above in [Creating a Workspace from the Archive](#).
2. Open the application properties (Application → Application Properties...).
3. Under Deployment, select the **iOS1** deployment profile and click the pencil icon.
4. Select iOS Options and confirm you have the correct Application Bundle Id and Application Archive Name (for more information about application bundle ids, refer to *Oracle Fusion Middleware Developing Mobile Applications with Oracle Mobile Application Framework* Documentation.)
5. Confirm that the application deploys in **Release Mode**.

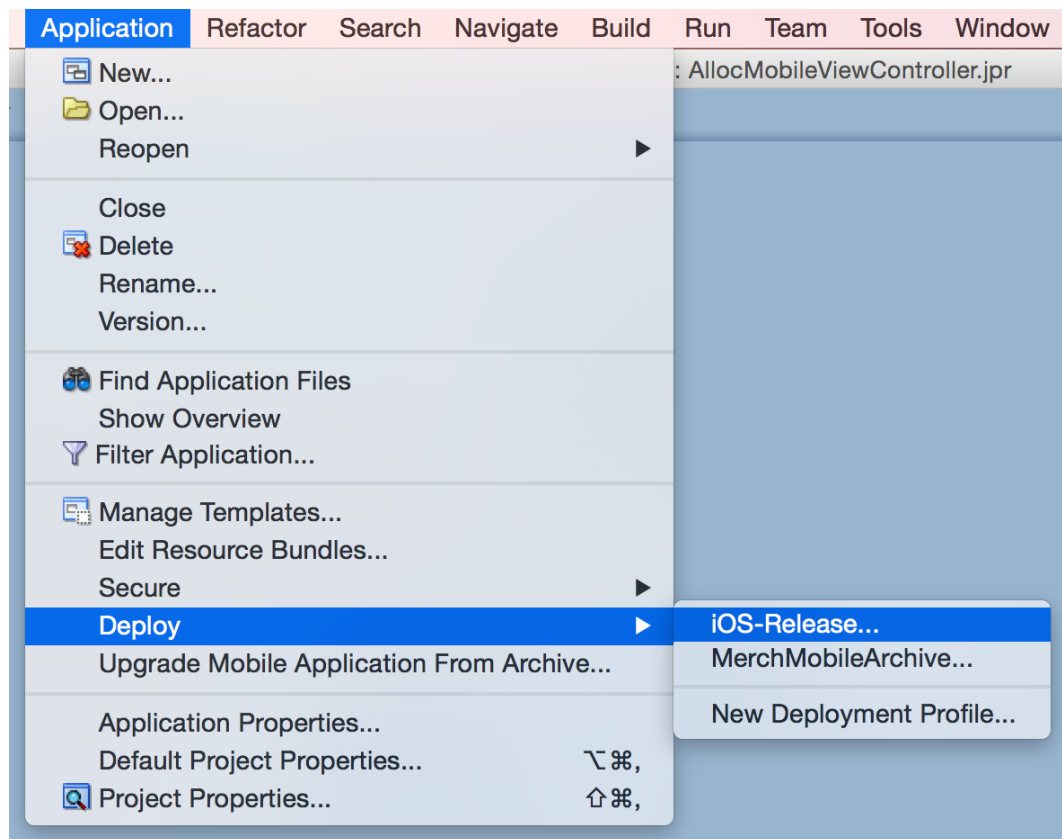
6. Check the other settings as needed.
7. Click OK.

Deploying Application to .ipa File

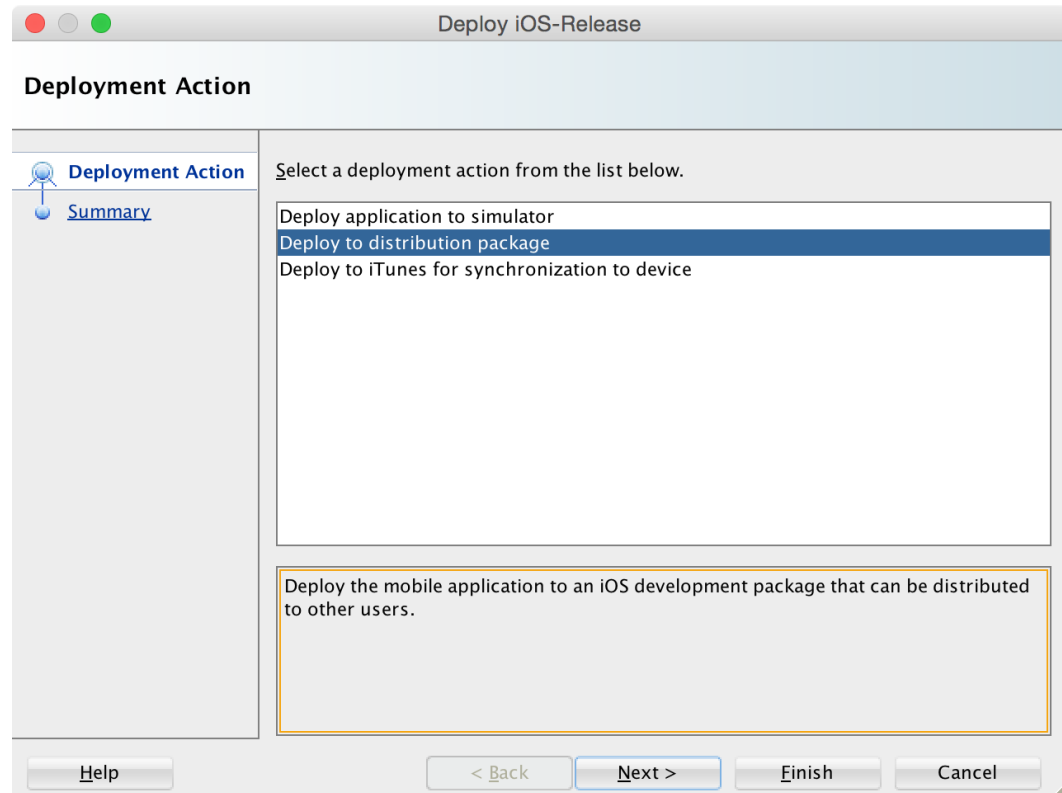
Note: If SIM Mobile is already deployed to a device, it is recommended to delete it from the device before redeploying it again.

To deploy SIM Mobile to a .ipa file, use the following steps:

1. In the **Application** menu, select **Deploy->iOS1**.



2. Select **Deploy to distribution package**.
3. Press **Finish** to begin deployment.



4. You can view the progress of the deployment by opening the Log window. (Window → Log)
5. After a successful deployment you can find the .ipa file within your workspace under the deploy folder.

For Enterprise app distribution refer to <https://developer.apple.com/library/ios/documentation/IDEs/Conceptual/AppDistributionGuide/Introduction/Introduction.html>.

For other distribution options, see *Oracle Fusion Middleware Developing Mobile Applications with Oracle Mobile Application Framework* documentation.

Configuring Application for Android Deployment

To configure SIM Mobile for Android deployment, use the following steps:

1. Open the workspace created above in [Creating a Workspace from the Archive](#).
2. Open the application properties (Application → Application Properties...).
3. Under Deployment, select the **Android1** deployment profile and click the pencil icon.
4. Select Android Options and confirm you have the correct Android settings.
5. Confirm that the application deploys in **Release Mode**.
6. If you wish to change Android application settings, do so in the subsections **Application Details** and **Application Images**.
7. Check the other settings as needed.
8. Click **OK**.

Note: Oracle recommends using devices running Android 5.1.x for running the SIM MAF UI.

If you have devices running Android versions 4.1 through 4.4.4, some server side configuration changes may be needed.

Please work with your network administrators on specific changes in your environment.

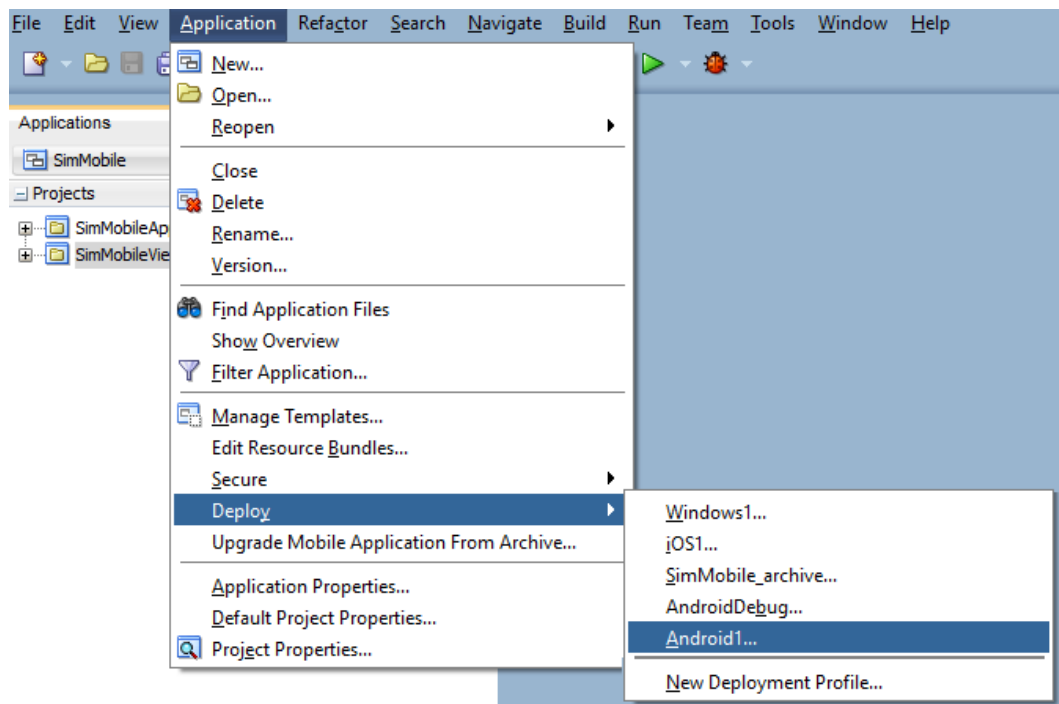
Android versions below 4.1 are not supported for running the MAF UI.

Deploying Application to .apk File

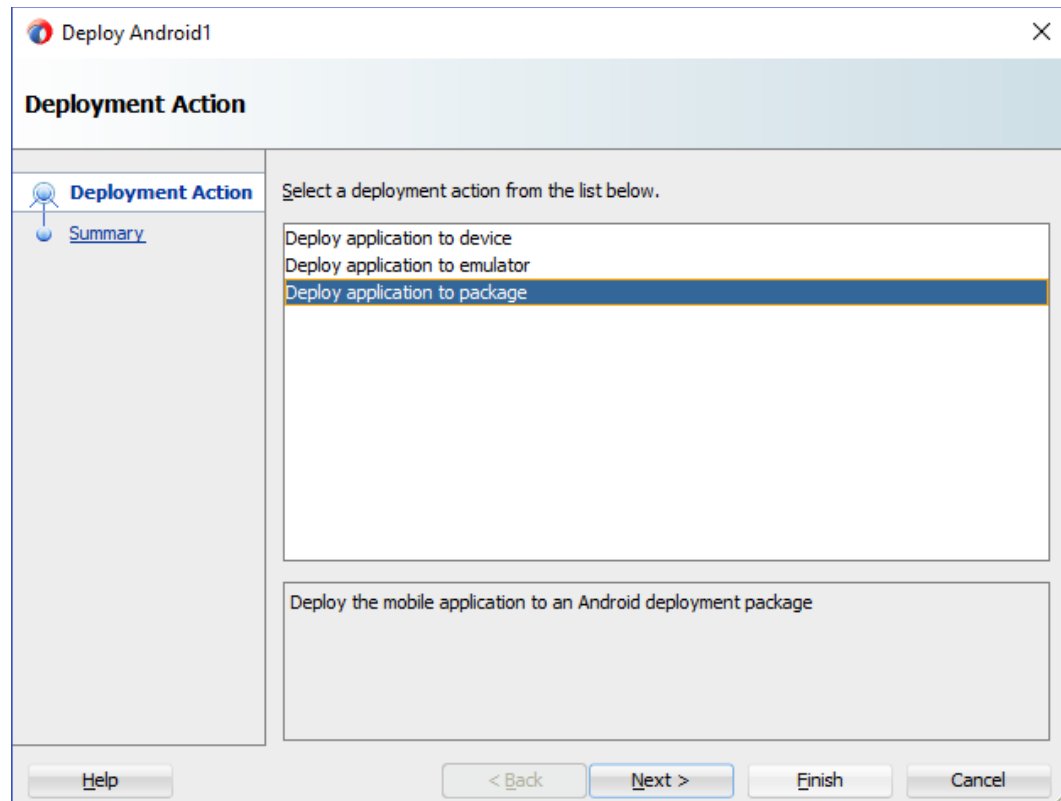
Note: If SIM Mobile is already deployed to a device, it is recommended to delete it from the device before redeploying it again.

To deploy SIM Mobile to a .apk file, use the following steps:

1. In the **Application** menu, select **Deploy>Android1**.



2. Select **Deploy Application to package**.
3. Press **Finish** to begin deployment.



4. You can view the progress of the deployment by opening the Log window. (Window → Log)
5. After a successful deployment you can find the .apk file within your workspace under the deploy folder.

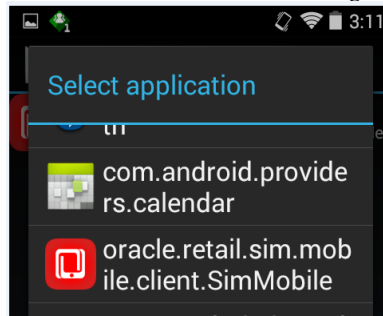
Configuring DataWedge Profile for Scanning

Note: This is applicable to Symbol / Motorola Android devices only.

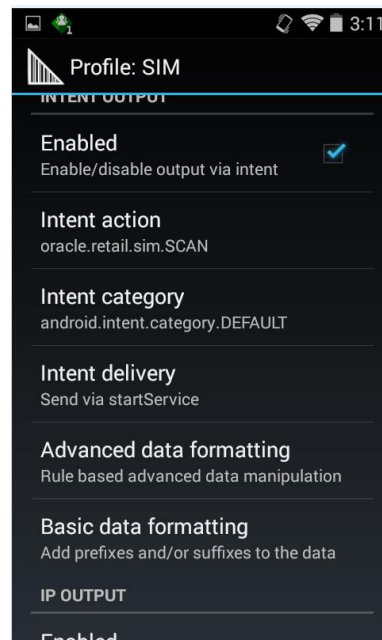
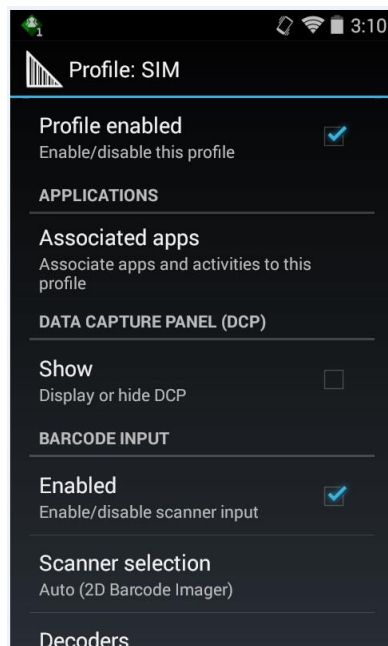
Open the DataWedge application on the device.

1. Click on the Menu Bar at the top right corner. Select **New Profile**
2. Enter profile name
3. Select the newly created profile
4. Make sure only these are **checked**
 - a. Profile enabled – enable/disable this profile
 - b. Barcode Input – enable/disable scanner input
 - c. Intent Output – enable/disable output via intent

5. Under the **APPLICATIONS** group select Associated apps



- a. Select the **oracle.retail.sim.mobile.client.SimMobile** identifier
6. Under the **INTENT OUTPUT** set
 - a. Intent action to **oracle.retail.sim.SCAN**
 - b. Intent category to **android.intent.category.DEFAULT**
 - c. Intent delivery to **Send via startService**
7. Save the settings and you would be able use the hardware buttons to provide scan inputs to the Sim Mobile application.



Configuring Application for Windows 10 Deployment

To configure SIM Mobile for Windows deployment, use the following steps:

1. Open the workspace created above in [Creating a Workspace from the Archive](#).
2. Open the application properties (Application → Application Properties...).
3. Under Deployment, select the **Windows1** deployment profile and click the pencil icon.
4. Select Windows Options and confirm you have the correct Application Bundle Id and Application Archive Name (for more information about application bundle ids, refer to *Oracle Fusion Middleware Developing Mobile Applications with Oracle Mobile Application Framework* Documentation.)
5. Confirm that the application deploys in **Release Mode**.
6. Check the other settings as needed.
7. Click **OK**.

Deploying Application to Windows

Windows 10 setup requires a different set of prerequisites and deployment steps. Setup and deployment steps are explained in the Oracle Mobile Application Framework documentation. For more information, see:

<https://docs.oracle.com/middleware/maf250/mobile/install/installing-mobile-application-framework-jdeveloper.htm#MAFIG24926>

Appendix: Installation Order

This section provides a guideline as to the order in which the Oracle Retail applications should be installed. If a retailer has chosen to use some, but not all, of the applications the order is still valid less the applications not being installed.

Note: The installation order is not meant to imply integration between products.

Enterprise Installation Order

1. Oracle Retail Merchandising System (RMS), Oracle Retail Trade Management (RTM)
2. Oracle Retail Sales Audit (ReSA)
3. Oracle Retail Extract, Transform, Load (RETL)
4. Oracle Retail Warehouse Management System (RWMS)
5. Oracle Retail Invoice Matching (ReIM)
6. Oracle Retail Price Management (RPM)
7. Oracle Retail Allocation
8. Oracle Retail Mobile Merchandising (ORMM)
9. Oracle Retail Customer Engagement (ORCE)
10. Oracle Retail Xstore Office
11. Oracle Retail Xstore Point-of-Service, including Xstore Point-of-Service for Grocery, and including Xstore Mobile
12. Oracle Retail Xstore Environment
13. Oracle Retail EFTLink
14. Oracle Retail Store Inventory Management (SIM), including Mobile SIM
15. Oracle Retail Predictive Application Server (RPAS)
16. Oracle Retail Predictive Application Server Batch Script Architecture (RPAS BSA)
17. Oracle Retail Demand Forecasting (RDF)
18. Oracle Retail Category Management Planning and Optimization/Macro Space Optimization (CMPO/MSO)
19. Oracle Retail Replenishment Optimization (RO)
20. Oracle Retail Regular Price Optimization (RPO)
21. Oracle Retail Merchandise Financial Planning (MFP)
22. Oracle Retail Size Profile Optimization (SPO)
23. Oracle Retail Assortment Planning (AP)
24. Oracle Retail Item Planning (IP)
25. Oracle Retail Item Planning Configured for COE (IP COE)
26. Oracle Retail Advanced Inventory Planning (AIP)
27. Oracle Retail Integration Bus (RIB)
28. Oracle Retail Service Backbone (RSB)
29. Oracle Retail Financial Integration (ORFI)

30. Oracle Retail Bulk Data Integration (BDI)
31. Oracle Retail Integration Console (RIC)
32. Oracle Commerce Retail Extension Module (ORXM)
33. Oracle Retail Data Extractor for Merchandising
34. Oracle Retail Clearance Optimization Engine (COE)
35. Oracle Retail Analytic Parameter Calculator for Regular Price Optimization (APC-RPO)
36. Oracle Retail Insights, including Retail Merchandising Insights (previously Retail Merchandising Analytics) and Retail Customer Insights (previously Retail Customer Analytics)
37. Oracle Retail Order Broker