Oracle® Fusion Middleware

Customization and Branding Guide for Oracle Mobile Security Suite

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Oracle Mobile Security Suite enhances employee productivity by allowing secure access to corporate applications and data from mobile devices while preserving a rich user experience. The Mobile Security Container creates an enterprise workspace on any mobile device, corporate owned or personal, and for all mobile platforms. Employees get seamless access to intranet resources, corporate data and mobile apps with enterprise-grade security and deep integration with Oracle Access Manager and Microsoft Active Directory authentication for true Single Sign-On.

You use the Enterprise Distribution static library framework Xcode project, which is part of Oracle Mobile Security Suite, to customize and brand the Oracle Workspace app for your company.

This document contains the following sections:

- Section 1, "Oracle Secure Workspace Customization for iOS"
- Section 2, "Oracle Secure Workspace Customization for Android"
- Section 3, "Documentation Accessibility"

1 Oracle Secure Workspace Customization for iOS

You can perform the following customizations on the Oracle Workspace app:

- Bundle identifier
- App name
- App icon
- Company logo
- EULA text file
- Custom config URLs for workspace app.
- Remove support for various document types.
- Enable Apple Data Protection

This section contains the following topics:

- Section 1.1, "Change Bundle Identifier"
- Section 1.2, "Change App Name"
- Section 1.3, "Change App Icon, Company Logo and Default Splash Screen"
- Section 1.4, "Change EULA File"
- Section 1.5, "Customize Config URLs"
- Section 1.6, "Enable Apple Data Protection"

- Section 1.7, "Remove Document Types"

1.1 Change Bundle Identifier

You need to use a bundle identifier that matches your provisioning profile. To change the bundle identifier follow these steps:

1. Open `BitzerSecureContainer.xcodeproj` in XCode.
2. Select **Build Settings -> General**.
3. Under the Identity section, change the domain part of **Bundle Identifier** to the domain you want to use.

   The default bundle identifier value is: `com.oracle.OracleSecureWorkspace`.

   Change this to: *`com.example`*`.OracleSecureWorkspace`, where `com.example` is your domain.

1.2 Change App Name

The default name of the app is `Workspace`. This is what you will see on iOS springboard. To change the default name, follow these steps:

1. Open `BitzerSecureContainer.xcodeproj` in XCode.
2. Select **Build Settings -> Info**.
3. Under Custom iOS Target Properties look for the Bundle display name and change it to the new app name.

1.3 Change App Icon, Company Logo and Default Splash Screen

To change the app icon, the company logo, and the default splash screen, replace the icons under the folder:

`BitzerSecureContainer/BitzerSecureContainer.embeddedframework/Resources`

The icons must have following dimensions:

Table 1 Icon Dimensions

Image Name	Dimension	Description
Icon.png	57 x 57	App Icon
Icon@2x.png	114 x 114	App Icon
Icon-72.png	72 x 72	App Icon
Icon-144.png	144 x 144	App Icon
Icon-Small.png	29 x 29	App Icon
Icon-Small@2x.png	58 x 58	App Icon
Icon-Small-50.png	50 x 50	App Icon
Default.png	320 x 480	iPhone splash screen
Default@2x.png	640 x 960	iPhone splash screen for retina
Default-568h@2x.png	640 x 1136	iPhone 5 splash screen for retina
Default-Portrait~ipad.png	768 x 1004	iPad portrait splash screen
Default-Portriat@x~ipad.png	1536 x 2008	iPad portrait splash screen for retina
Default-Landscape~ipad.png	1024 x 748	iPad landscape splash screen
Default-Landscape@2x~ipad.png	2048 x 1496	iPad landscape splash screen for retina

Table 1 (Cont.) Icon Dimensions

Image Name	Dimension	Description
company-logo.png	200 x 55	Company logo image for iPhone
company-logo@2x.png	400 x 110	Company logo image for iPhone with retina
company-logo~ipad.png	600 x 165	Company logo image for iPad
company-logo@2x~ipad.png	1200 x 330	Company logo image for iPad with retina

1.4 Change EULA File

To replace the default EULA text, change the text in the file:
`BitzerSecureWorkspace/BitzerSecureWorkspace.embeddedframework/Resources/en.lproj/EULA.txt`

1.5 Customize Config URLs

The default URLs and help text on the Workspace config screen are customizable. Follow these steps to customize them:

1. Open `BitzerSecureWorkspace.xcodeproj` in Xcode
2. Open the file:
   `BitzerSecureContainer/BitzerSecureContainer.embeddedframework/Resources/CustomizableSettings.plist`
3. The Config URL settings are under the Root node in an Array type item called **CONFIG_URL_SETTINGS**. Each item in this array represents a Config URL that will be available for selection on the Config screen. If no items are present for **CONFIG_URL_SETTINGS** array, a default demo URL and help text is displayed. If one or more items are present under the **CONFIG_URL_SETTINGS** array, the user is presented with custom URL selection options.
4. Modify **Item 0** under **CONFIG_URL_SETTINGS** and enter your customized Config URL. The information to enter is as follows:
   - **Label**: this is text that will be displayed instead of URL. This should be a user friendly text that describes your Mobile Secure Access Server site. e.g: If you have more than one Mobile Secure Access Server sites you can label them as, Houston Site, or BYOD Site. Type must be String.
   - **Value**: This should be the Mobile Security Access Server config URL. Type must be String.
   - **Autoconfigure**: This is optional setting and is only used if there is only one config URL. If set to YES, the user is not prompted for config URL. On launching the Workspace app for the first time, app will be configured using this URL. If set to NO, the user is presented with Config URL screen and a link will appear under Config URL field.
5. To add more than one Config URL, close **Item 0**, copy and paste it to create a duplicate item, and edit it. Multiple Config URLs are presented as an action sheet with site labels for each button.

   When more than one Config URLs is present, help text is displayed under the Config URL text field. Help text can be customized by editing the `SelectSiteTextConfigViewKey` key in `CustomizableText.strings`. The title for the action sheet can be customized by editing the `SelectSiteTextActionSheetKey` key in `CustomizableText.strings`. `CustomizableText.strings` is located under `BitzerSecureContainer/BitzerSecureContainer.embeddedframework/Resources`

1.6 Enable Apple Data Protection

To enable Apple Data Protection, follow these steps:

1. Log into the Apple iOS Dev Center under https://developer.apple.com/ and go to Certificate, Identities and Profiles.
2. Go to **Identities** and select the App ID you want to use with Workspace app.
3. Edit the App ID and, select **Data Protection**, then select **Protected Unless open** under Sharing and Permissions.
4. Regenerate your provisioning profile and use that profile for signing the workspace app.

1.7 Remove Document Types

The Workspace app enables you to open the following documents types:

- Word: `docx` and `doc`
- Powerpoint: `pptx` and `ppt`
- Excel: `xlsx` and `xls`
- Text files
- `rtf`
- Adobe `pdf`
- `jpg`, `jpeg`, `png`, `tif`, `tiff`, `bmp`, `gif`
- `mov`

To remove support for any or all of these file types, that is, to prevent the Workspace app from opening them, you must remove the document types from `BitzerSecureWorkspace.xcodeproj` and rebuild the Workspace app. Follow these steps:

1.7.1 Removing the Document Types from BitzerSecureWorkspace.xcodeproj

1. Open `BitzerSecureWorkspace.xcodeproj` in Xcode.
2. Select the **Info Settings** tab and scroll down to Document Types section.
3. Remove the document types: Bitzer MS Reader, Bitzer Document Editor, Bitzer PDF Reader and Bitzer Image Viewer. Do not remove any other documents types.

1.7.2 Rebuilding the Workspace

To rebuild the Workspace app after making changes, follow these steps:

1. Make sure the bundle identifier has been updated to match your provisioning profile
2. Ensure the correct provisioning profile has been selected under **Build Settings -> Code Signing**.
3. Ensure the correct code signing identity has been selected under **Build Settings -> Code Singing**.
4. Select **iOS Device** from **Destination**. The Workspace app can only be built for **iOS Device**.
5. Select **Product** from the menu and then select **Archive**.
6. In the **Organizer - Archives** window click **Distribute**.
7. In the **Select the method for distribution** window, select **Save for Enterprise or Ad Hoc Deployment** and click **Next**.
8. Select **Provisioning Profile** and click **Export**.
9. Save the app without selecting **Save for Enterprise Distribution**. This generates a signed IPA for the Workspace app.

Once the Workspace app `ipa` file is generated, you can upload it to your Catalog on the Mobile Security Administrative Console or to your enterprise app store.

1.7.3 Certificate and Provisioning Profile Requirements

Workspace app and containerized apps must be signed using provisioning profiles that have same App ID Prefix. Containerized apps will not work with Workspace if they have a different App ID Prefix.

2 Oracle Secure Workspace Customization for Android

Secure Workspace unsigned APK that is part of Oracle Mobile Security Suite can be used for customization and branding. You can perform the following customizations:

- App package name
- App name
- App icon
- Splash screen
- EULA text file
- Custom config URLs for workspace app
- Remove support for various document types

This section contains the following topics:

- Section 2.1, "Extracting APK for Customization"
- Section 2.2, "Change App Package Name"
- Section 2.3, "Change App Name"
- Section 2.4, "Change App Icon"
- Section 2.5, "Change Splash Screen Image"
- Section 2.6, "Change EULA"
- Section 2.7, "Customize Config URLs"
- Section 2.8, "Remove Document Types"
- Section 2.9, "Packaging Customized APK"
- Section 2.10, "Signing APK"
- Section 2.11, "Signing Certificate Requirements"

2.1 Extracting APK for Customization

Before you can customize or make any changes for branding, you must extract the APK. Ensure that the Oracle Mobile Security App Containerization Tool has been installed, then run the following command to extract the APK.

```
build-apk.sh extract SecureWorkspace-unsigned-xxxx.apk
```

2.2 Change App Package Name

To change the package name for a Secure Workspace app, follow these steps:

1. Go to the folder where the APK was extracted.

2. Edit file `AndroidManifest.xml`.
3. On the second line of the file, modify the attribute package to the package name you want. For example:

```
<manifest android:versionCode="1" android:versionName="@string/version_name"
package="com.acme.secureworkspace" xmlns:android="http://schemas.android.com/apk/res/android">
```

4. Save the file.

2.3 Change App Name

To change name of a Secure Workspace app follow these steps:

1. Go to the folder where the APK was extracted.
2. Edit the file `res/values/strings.xml`.
3. Modify the value for the string name `app_name`. For example:

```
<string name="app_name">My Workspace</string>
```

4. Save the file.

2.4 Change App Icon

To change the icon of a Secure Workspace app, follow these steps:

1. Go to the folder where the APK was extracted.
2. Under the `res` folder, there are several folders with names like `drawable-xxxx`. Each of these folder contains a file, `icon.png`, with a specific resolution. Replace each `icon.png` file with your own icon. Make sure the resolutions match.

For more information about resolution and size of images to be placed in the respective drawable folders, see "Supporting Multiple Screens" at http://developer.android.com

2.5 Change Splash Screen Image

To Change the splash screen image, follow these steps:

1. Go to folder where the APK was extracted.
2. Under the `res` folder, there are several folders with names like `drawable-xxxx`. Each of these folder contains a file, `splashscreen.png`, with a specific resolution. Replace each `splashscreen.png` file with your own icon. Make sure the resolutions match.

2.6 Change EULA

To replace the default EULA text, follow these steps:

1. Go to the folder where the APK was extracted.
2. Replace the contents of the file `assets/EULA` with your custom `EULA` file.
3. Save the `EULA` file.

2.7 Customize Config URLs

To add custom config URLs on your config screen in Workspace app, follow these steps:

1. Go to the folder where the APK was extracted.

2. Edit the file `assets/prop.txt`.
3. Add config URLs under `"--- Choose config urls from List ---"`. URLs must be comma separated and each URL must be enclosed within double quotes. For example:

```
"properties":
   {
      "autoConfigure": "false",
      "configURLs":
      [
         "--- Choose config urls from List ---",
                "https://omss1.acme.com/bmax/bmax_config.json"
               ,"https://omss2.acme.com/bmax/bmax_config.json"
      ]
   }
```

4. When a single config URL is specified, then autoConfigure can be used. If autoConfigure is set to true, you are not prompted to select a config URL. Instead, the specified URL is selected for auto configuration.
5. Save the file `prop.txt`.

2.8 Remove Document Types

To prevent the Workspace app from opening certain file types follow these steps:

1. Go to the folder where the APK was extracted.
2. Edit file `AndroidManifest.xml`.
3. Search for the data element in intent-filter that matches the mimeType or path pattern for the file type you want to prevent from opening in Workspace app.
4. Delete the data element.
5. Save `AndroidManifest.xml`.

2.9 Packaging Customized APK

To package the customized APK content into an APK, ensure that the Oracle Mobile Security App Containerization Tool has been installed, then run following command:

`build-apk.sh package` *`Secure_Workspace_apk_folder output_apk`*

`Secure_Workspace_apk_folder` is where the APK was extracted using the `extract` command.

2.10 Signing APK

To sign an APK, use the `c14n -c signonly` command. For example:

`c14n -c signonly -i` *`input`*`.apk -o` *`output`*`.apk -keystore` *`release-key`*`.keystore -storepass` *`password`* `-storealias release -v`

For more information on signing Android apps, see "Signing Your Applications" at:
http://developer.android.com

2.11 Signing Certificate Requirements

Workspace app and containerized apps must be signed using the same certificate. Containerized apps will not work with Workspace if they are signed with a different certificate.

For more information on signing Android apps, see "Signing Your Applications" at http://developer.android.com

3 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers 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 http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

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