App Re-branding and Compiling
How to rebrand and compile apps using the MicroStrategy Mobile SDK
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App Re-branding and Compiling

**Agenda**

- How to adapt to corporate branding by customizing icons, as well as splash, launch, and login screens
- How to rebrand and deploy multiple distinct apps for employees, business partners, and customers
- How to compile apps using the MicroStrategy Mobile SDK in a quick, convenient, code-free way
- How to deploy and publish compiled apps to internal or public app stores

Publish to public app stores (or internal app store)

Rebrand with custom icon

Add custom splash, launch, and/or login screens
MicroStrategy Mobile SDK
Overview
Three Key Target Scenarios behind the MicroStrategy SDK

Embed. Integrate. Extend

Embed

MicroStrategy content into custom applications and workflows

Integrate

MicroStrategy platform into a custom product offering

Extend

MicroStrategy capabilities with 3rd party functionality (vice versa)
A comprehensive set of APIs allows you to integrate, embed, and extend the functionality of your existing investments.

MicroStrategy Community for documentation, samples, etc.: [https://community.microstrategy.com/s/topic/0TO44000000FliLGAS/sdk-u009](https://community.microstrategy.com/s/topic/0TO44000000FliLGAS/sdk-u009)
MicroStrategy Mobile SDK
The Mobile SDK provides resources to customize MicroStrategy Mobile on Android and iOS mobile devices.
Requirements and Setup
Requirements and Setup
MicroStrategy Mobile SDK

Technical

• MicroStrategy Mobile SDK for iOS
  • Mac
  • Xcode
  • iOS Developer Enterprise Program OR Apple Developer Program
  • MicroStrategy Mobile iOS SDK

• MicroStrategy Mobile SDK for Android SDK
  • Android Studio
  • MicroStrategy Mobile Android SDK
  • https://www.youtube.com/watch?v=fR-bxSe1FMQ
  • https://lw.microstrategy.com/msdz/MSDL/GARelease_Current/docs/projects/MobileSDK/Content/topics/android/andr_What_Can_You_Do_with_the_Mobile_SDK.htm
Requirements and Setup

Customization Scenarios

Scenarios

- Rebranding Mobile
- Adding intro animation
- Customizing strings
- Customizing the navigation bar
- Customizing fonts
- Using dedicated mobile widgets or creating your own widget to display data
- Creating a custom app

Skills

- MicroStrategy App Development
- Xcode
- Objective-C / iOS Development
- Java
Rebranding Scenarios

iOS
Introduction

- Code free changes
- Allows for personalization
- Simplifies deployment and configuration
Rebranding Scenarios

What can I do?

**Scenarios**

- **Visual Rebranding**
  - App Name
  - App Icon
  - App Splash screen
  - Add custom fonts
  - Enabling 3D animations (iOS only)

- **Functional Rebranding**
  - URL Scheme
  - App pre-configuration
  - Add custom help

Publish to public app stores (or internal app store)

Rebrand with custom icon

Add custom splash, launch, and/or login screens
Rebranding Scenarios

XCode Project/Target Settings

MicroStrategy Mobile XCode Project

MSTR Project

iPhone Target

iPad Target

Obj-C Classes
Images
Frameworks
App

Obj-C Classes
Images
Frameworks
App
Rebranding Scenarios

XCode Overview

Build Controls

Toolbar

Project/Target Settings

Project Navigator

Debugger

File Inspector
Rebranding Scenarios
XCode Project/Target Settings
Rebranding Scenarios

XCode Project/Target Settings
Rebranding Scenarios
XCode - The iOS Simulator
Rebranding Scenarios
Application Name Rebranding

Steps:

- Open XCode Project
- Alternatively select top of tree in Project Navigator (MicroStrategyMobile)
- Select iPhone or iPad target
- Adjust the Display Name and bundle identity section

- Alternatively, locate the Info_iPad/info_iPhone.plist file
- Modify the ‘Bundle Display Name’ value
Rebranding Scenarios
Application Icon and SplashScreen Rebranding

Changing the App Icon and SplashScreen

- Open XCode Project
- Set the desired Target within the center settings panel
- Navigate to the ‘General’ tab
- Click on the arrow next to ‘App Icons Source’
- Drag images to their corresponding destinations.
- For SplashScreen, the images must be provided as separate files, see next slide.
Rebranding Scenarios
Adding 3D Animation

That extra visual “wow”

iOS only, 2 Flavors:
• Glowing globe
• Spinning logo
Rebranding Scenarios
Adding 3D Animation

• Open XCode Project
• Add image resource
  • In the Project Navigator, expand Custom, then FinalBundle.bundle, then Contents, and finally Resources.
  • Right click Resources and select ‘Add Files to…’
  • Select image and Add
• Animate
  • Right click Custom folder and select ‘Add Files to…’
  • Import MSTRCustomizations.plist (.../Custom/)
  • Add parameter ‘introAnimationType’ as Integer
  • Add parameter ‘introAnimationImage’ as String
  • Set 1 or 2 for ‘introAnimationType’ value
  • Set image name for ‘introAnimationType’ value
Mobile Configuration
Mobile Configuration

PRE-CONFIGURING MOBILE APP

So how do we bridge the communication gap? How do we tell the mobile app to “point” to, or be aware of, our Mobile Server for content?

- Generate a specific URL link and distribute it to users in an email or on a web page.
- Embed the configuration file’s content in the mobile app.
Rebranding Scenarios
URL Scheme Rebranding

- URL schemes allow URL's run through Safari to interact with and launch iOS applications
- MicroStrategy uses URL Schemes to configure the application through a configuration link

```
URL Scheme

mstr://?url=http%3A%2F%2Flocalhost%3A8080%3A8080%2FMicroStrategyMobile%2FServlet%2FtaskProc%3FtaskId%3DgetMobileConfiguration%26taskEnv%3Dxml%26taskContentType%3Dxml%26configurationID%3Da099c563-9164-4107-9cfd-ac4f5fa09935&authMode=1&dt=2
```

Purpose of rebranding

- White labeling
- Allow links to target a known application

```
URL Scheme

StoreFront://?url=http%3A%2F%2Flocalhost%3A8080%3A8080%2FMicroStrategyMobile%2FServlet%2FtaskProc%3FtaskId%3DgetMobileConfiguration%26taskEnv%3Dxml%26taskContentType%3Dxml%26configurationID%3Da099c563-9164-4107-9cfd-ac4f5fa09935&authMode=1&dt=2
```
Rebranding Scenarios
Preconfiguring the mobile application

How To:

• Create Mobile Configuration on MSTR Mobile Server
• Copy the configuration XML for the desired configuration
• Open XCode Project
• Locate the iPad/iPhone folder and locate the ‘Preferences.xml’
• Replace contents of ‘Preferences.xml’ with the configuration XML
Rebranding Scenarios
Installing multiple MicroStrategy apps on the same device

An application MUST have a unique Bundle Identifier
Apps with identical bundle identifiers will be overwritten by the newest installed application
Rebranding Scenarios
Installing multiple MicroStrategy apps on the same device
Deployment Options
Flexible App Distribution

MicroStrategy offers several deployment methods that organizations can leverage to distribute apps.

**Public app store** – Compile apps and submit them directly to Apple and/or Google for publishing in their public app stores, Apple App Store and Google Play.
- Apple Developer Program
- Apple Developer Enterprise Program

**Internal app store / Email** – Set up your own private webpage and post links to download your apps. Or, send a link to download the app via email.

**Enterprise Mobility Management (EMM)** – Configure and deploy apps via EMM: AirWatch, MobileIron, or BlackBerry Dynamics.
iOS App Compiling & Distribution Methods
Create Archive

Creating an archive

• The first step to creating an IPA is to first create an archive

• In XCode: Product > Archive (With Generic iOS Device as destination)
Create IPA

Creating an IPA

- Archives are then exported to IPA files (Ad-Hoc)
- Archives are managed within Organizer (Window > Organizer)
iOS App Compiling & Distribution Methods

Distribution Methods

- **iTunes** - Must be linked to device

- **Remote Install link (3rd party hosted)** -
  - [http://www.diawi.com](http://www.diawi.com)
  - www.diawi.com - Development & In-house Apps Wireless Installation

- **Web Clip**
  - Web Clip - Utilizes manifest

- **XCode**
  - No certificates needed!
  - Build apps to a device without an Apple Developer Program as of XCode 7.0
  - Only requires an Apple ID

- **Through an EMM/MDM provider**
Thank You

Questions?
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