IBM Navigator Mobile Software Development Kit Developer Guide

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Versions

2.2.1 (May 2016)

Overview

You can build high-quality mobile apps for the Apple iOS platforms with the IBM Navigator Mobile Software Development Kit. This release supports both IBM FileNet Content Manager and IBM Content Manager repositories.

Here are the main goals of the software development kit (SDK):

Encapsulation of implementation detail	The encapsulation of low-level implementation detail helps you focus on higher value work such as business logic or user experience. This low-level detail includes the following items: - Model layer for common Navigator objects - Networking layer to perform common tasks - Utilities for common functionalities
Small API	The API provides the means for achieving a task in only one way so that the API can be kept as small as possible.
Custom control	You can inject custom logic to achieve greater control over system behavior.

Here are some of the tasks that you can perform with the SDK:

- Connect and log in to an on-premises IBM Content Navigator server.
- View all documents and properties in a Navigator repository.
- Add and remove documents in a Navigator repository.
- Search for content in a Navigator repository.
- Use search templates to search for content in a Content Navigator repository.
- Use teamspaces to manage content and users.
- Use favorites to quickly access content.
- Sync content to keep it up to date.

iOS

Package overview

The IBM Navigator Mobile SDK package includes the following components:

SDK	The SDK is written in Swift, but it can be integrated with either Objective-C or Swift code.
Sample project	The sample Xcode project contains sectioned code that performs common tasks of the SDK such as login, browsing content, adding documents, deleting documents, and searches. To familiarize yourself with the mechanisms and features of the SDK, run the sample App and modify the code to see how the SDK can be called. Follow and review the comments in the sample application code as well. The sample Xcode project is also a working project that shows how the SDK can be embedded. It can be used as a starting point for any custom application. **Important**: The sample project is intended to show you how to use the SDK. It is not intended to be a tutorial on how to design your application. For example, it does not contain robust error handling and recovery.
Reference documentation	The SDK provides reference documentation in a Docset format for each public interface class, method, and type.

SDK details

The SDK uses the Factory pattern and is organized into two sections:

Factory	Factory methods to obtain all the actual model objects and perform high-level tasks.
Model	The entire model layer that shows the protocols and interfaces that can be called.

SDK updates

The following updates were made in these various releases.

V2.2.1

Updated	Updated all source, test, and example code to compile against Swift 2.2 and Xcode 7.3.x.
Upgrade notes	You must adapt existing code to Swift 2.2 and Xcode 7.3.x. Existing code will not work with previous versions of Swift or Xcode.

V2.2.0

New	Added APIs for running stored searches that are set to run when opened. o Added IBMECMSearchTemplate, IBMECMSearchTemplateBuilder, IBMECMSearchResultSet, and other search-related classes for running stored searches. Added APIs to make it easier to deal with properties and permission collections. o Added IBMECMItemPermissions and IBMECMItemProperties classes to manage properties and permission collections. o Added methods in IBMECMRepository and IBMECMContentItem to use these new collections. The previous methods were deprecated. Added enum types for various constants, such as IBMECMPropertySettability, IBMECMPropertyCardinality, and IBMECMAccessInheritableDepth. o Various methods were modified to use these new enum types. The previous methods were deprecated.
Updated	Updated APIs to support IBM Content Manager repositories. The SDK now supports IBM FileNet Content Manager and IBM Content Manager repositories. Updated all source, test, and example code to compile against Swift 2.1. o Swift 2.2 is not supported.
Upgrade notes	There are breaking changes in this release where you are required to adapt existing code to the new SDK version. Some of these changes include:

	• Class variables to support stricter class types.
	  ◦ Some examples include the roles variable in IBMECMTeamspace, the team variable in IBMECMTeamspace, and the users variable in IBMECMUser.
	• Class variables to support stricter enum types.
	  ◦ Some examples include capabilityComment in IBMECMContentItem and inheritableDepth in IBMECMContentItem.
	• Deprecated methods and new methods added for these stricter types.

Prerequisites

You are expected to have a working knowledge of IBM Content Navigator, Xcode, and the Swift or Objective-C programming languages.

The prerequisites for using the SDK are as follows:

- An IBM Content Navigator server that runs IBM Content Navigator 2.0.3.5 or later
- An IBM FileNet Content Manager server or IBM Content Manager server that is set up with IBM Content Navigator
- An Apple Mac that runs OS X 10.10 or later with Xcode 7.3.x
- The IBM Navigator Mobile SDK 2.2.1 or later package

Downloading the SDK

To obtain the SDK:

1. Log in to Fix Central at http://www-933.ibm.com/support/fixcentral/.
2. On the **Select Product** tab, from the **Product Group** list, select Enterprise Content Management.
3. From the **Select from Enterprise Content Manager** list, select Enterprise Content Management Mobile.
4. From the **Installed Version** list, select 2.2.1.
5. From the **Platform** list, select iOS and click **Continue**.
6. Select **Browse for fixes** and click **Continue**.
7. Select the check box next to tool: IBM_Navigator_Mobile-2.2.1-SDK and click **Continue**.
8. Select your preferred download option in the **Select download options** area and click **Continue**.
9. Click **Download now** to download the package.

Getting started with the SDK

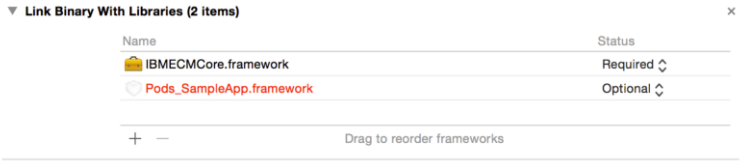
To use the IBM Navigator Mobile SDK, you must integrate it with an existing or new Xcode project. Typically, your use of the SDK begins with the factory class `IBMECMFactory`.

To integrate the SDK with an Xcode project:

1. Put the SDK binary IBMECMCore.framework file and the Xcode project in the same folder. These instructions use the SampleApp Xcode project as an example.

   Use the podfile command to install the pods that are required by the SDK and to create the workspace to manage your app [along with the pods]. For more information about installing pods, see the CocoaPods Getting Started guide at https://guides.cocoapods.org/.

2. Open the `mobileIBMECMCloudAppWorkspace.xcworkspace` workspace and import the SDK binary files to **Targets->SampleApp->Build Phase->Linked Framework and Libraries**.



3. Import the SDK binary files to **Targets-> SampleApp ->General->Embedded Binaries**.

Now, you can use IBMECMCore to develop an app in the `sampleApp` Xcode project.

FAQ

Why should I use the `IBMECMFactory` rather than creating my own objects?

The IBM Navigator Mobile SDK encapsulates and manages the object lifecycle. In order to create managed objects, you must use the provided object factory.

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