

IBM Navigator Mobile SDK Developer Guide

Version 3.4.0.7

February 2023

Table of Contents

| | |
|---|---|
| Overview | 2 |
| iOS | 3 |
| <i>Package over view</i> | 3 |
| <i>SDK details</i> | 3 |
| <i>SDK updates</i> | 3 |
| <i>Prerequisites</i> | 4 |
| <i>Downloading the SDK</i> | 4 |
| <i>Getting started with the SDK</i> | 4 |
| <i>FAQ</i> | 5 |
| Notices | 6 |

Overview

You can build high-quality mobile Apps for the Apple iOS platform with the IBM Navigator Mobile SDK. This release supports both IBM FileNet Manager (FileNet P8) and Content Manager 8 (CM8) repositories.

The main goals of the SDK:

| | |
|---|---|
| Encapsulation of implementation detail | <p>The encapsulation of low-level implementation detail helps you focus on higher value work such as business logic or user experience.</p> <p>This low-level detail includes the following items:</p> <ul style="list-style-type: none">• Model layer for common Navigator objects• Networking layer to perform common tasks• Utilities for common functions |
| Small API | <p>The API provides the means for achieving a task in only one way so that the API can be kept as small as possible.</p> |
| Custom control | <p>You can add custom logic to achieve greater control over system behavior.</p> |

You can complete the following tasks by using the SDK:

- Connect and log in to an on-premises IBM Content Navigator server.
- Retrieve repositories for a desktop.
- View all documents and properties in a Content Navigator repository.
- Add and remove documents in a Content Navigator repository.
- Search for content in a Content Navigator repository.
- Use search templates to search for content in a Content Navigator repository.
- Search Templates, add a document, check in document, and edit properties with External Data Services (EDS).
- Use entry templates to add or check in a document, and create a folder.
- Use teamspaces to manage content and users.
- Use favorites to quickly access content.
- Synchronize 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 | <p>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.</p> <p>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.</p> <p>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.</p> |
| Reference documentation | The SDK provides reference documentation in a Doc-set 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 is a list of updates in this release.

| | |
|---------|--|
| Added | <ul style="list-style-type: none">Added an API in the IBMECMDesktop class to decrypt a short encrypted link. |
| Updated | <ul style="list-style-type: none">Updated parameters of retrievalItemByVsId methods in the IBMECMRepository class.All source, test, and example code to adapt to the API changes. |

Prerequisites

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

The prerequisites for using the SDK include the following:

- An IBM Content Navigator server that runs IBM Content Navigator 3.0.0 or later
- An IBM FileNet Content Manager server or an IBM Content Manager server that is set up with IBM Content Navigator
- A Mac system that runs macOS Monterey 12.6 or later with Xcode 13.4.1
- The IBM Navigator Mobile SDK 3.4.0.7

Downloading the SDK

To download the SDK, complete the following steps:

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 **3.4.0**.
5. From the **Platform** list, select **iOS** and click **Continue**.
6. Select **Browse for fixes** and click **Continue**.
7. Check **IBM_Navigator_Mobile-3.4.0.7-SDK** and click **Continue**.
8. Select your preferred download option in the **Select download** options area and click **Continue**.
9. Click the download link 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 `IBMECMCoreSample` 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 `navigatorMobileSDK.xcworkspace` workspace and import the SDK binary files to Targets -> `IBMECMCoreSampleApp` -> Build Phase -> Link Binary With Libraries

| ▼ Link Binary With Libraries (3 items) | | × |
|--|------------|---|
| Name | Status | |
| QuickLook.framework | Required ⬇ | |
| IBMECMCore.framework | Required ⬇ | |
| Pods_IBMECMCoreSampleApp.framework | Required ⬇ | |
| + — Drag to reorder frameworks | | |

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

| ▼ Embedded Binaries | |
|----------------------------------|--|
| IBMECMCore.framework ...in ../.. | |
| + — | |

Now, you can use IBMECMCore to develop an App in the IBMECMCoreSample 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.

Notices

This information was developed for products and services that are offered in the US. This material may be available from IBM® in other languages. However, you may be required to own a copy of the product or product version in that language in order to access it.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter that is described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing IBM Corporation North Castle Drive Armonk, NY10504-1785 US

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing Legal and Intellectual Property Law IBM Japan Ltd. 19-21, Nihonbashi-Hakozakicho, Chuo-ku Tokyo 103-8510, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Therefore, some states do not allow disclaimer of express or implied warranties in certain transactions; this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes are incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM websites are provided for convenience only and do not in any manner serve as an endorsement of those websites. The materials at those websites are not part of the materials for this IBM product and use of those websites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who want to have information about it for enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information, which has been exchanged, should contact:

IBM Corporation J46A/G4 555 Bailey Avenue San Jose, CA 95141-1003 US Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program that is described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement, or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results that are obtained in other operating environments may vary significantly. Some measurements

may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements, or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility, or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals only.

This information contains examples of data and reports that are used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses that are used by an actual business enterprise is entirely coincidental.

Terms and conditions for product documentation

Permissions for the use of these publications are granted subject to the following terms and conditions.

Applicability

These terms and conditions are in addition to any terms of use for the IBM website.

Personal use

You may reproduce these publications for your personal, noncommercial use if all proprietary notices are preserved. You may not distribute, display, or make derivative work of these publications, or any portion thereof, without the express consent of IBM.

Commercial use

You may reproduce, distribute, and display these publications solely within your enterprise if all proprietary notices are preserved. You may not make derivative works of these publications, or reproduce, distribute, or display these publications or any portion thereof outside your enterprise, without the express consent of IBM.

Rights

Except as expressly granted in this permission, no other permissions, licenses, or rights are granted, either express or implied, to the publications or any information, data, software or other intellectual property contained therein.

IBM reserves the right to withdraw the permissions that are granted herein whenever, in its discretion, the use of the publications is detrimental to its interest or, as determined by IBM, the above instructions are not being properly followed.

You may not download, export, or reexport this information except in full compliance with all applicable laws and regulations, including all United States export laws and regulations.

IBM MAKES NO GUARANTEE ABOUT THE CONTENT OF THESE PUBLICATIONS. THE PUBLICATIONS ARE PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE.

Privacy policy considerations

IBM Software products, including software as a service solves, ("Software Offerings") may use cookies or other technologies to collect product usage information, to help improve the user experience, to tailor interactions with the user or for other purposes. In many cases no personally identifiable information is collected by the Software Offerings. Some of our Software Offerings can help enable you to collect personally identifiable information. If this Software Offering uses cookies to collect personally identifiable information, specific information about this offering's use of cookies is set forth below.

This Software Offering does not use cookies or other technologies to collect personally identifiable information.

If the configurations deployed for this Software Offering provide you as customer the ability to collect personally identifiable information from users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for notice and consent.

For more information about the use of various technologies, including cookies, for these purposes, see IBM's Privacy Policy at <http://www.ibm.com/privacy> and IBM's Online Privacy Statement at <http://www.ibm.com/privacy/details> the section entitled "Cookies, Web Beacons, and Other Technologies" and the "IBM Software Products and Software-as-a-Service Privacy Statement" at <http://www.ibm.com/software/info/product-privacy>.

Trademarks

The following terms are trademarks of the International Business Machines Corporation in the United States, other countries, or both:

<http://www.ibm.com/legal/copytrade.shtml>

Other product and service names might be trademarks of IBM or other companies.