Appeon Workspace User Guide

Appeon Mobile® 2013 R2

FOR IOS & ANDROID

Contents

1 About this Book

1.1 Audience

This book is for those who want to run the Appeon native mobile applications in Appeon Workspace.

1.2 How to use this book

This book provides information that enables you to download and install Appeon Workspace, and manage your Appeon native mobile applications in Appeon Workspace.

Chapter 1: gives a general introduction of this guide.

Chapter 2: introduces the layout, workflow, architecture, and major features of Appeon Workspace.

Chapter 3: gives instructions on adding, editing, closing, and deleting applications in Appeon Workspace.

Chapter 4: describes the configuration settings in Appeon Workspace.

Chapter 5: describes the interfaces to the Appeon Workspace help, the copyright information, and the Appeon Workspace ID.

2 Introduction to Appeon Workspace

Appeon Workspace provides its intended audience the perfect tool for managing Appeon Mobile applications conveniently.

2.1 What is Appeon Workspace

Appeon Workspace consists of a set of mobile client libraries and a graphical user interface. The mobile client libraries render the mobile-style UI, support the PowerScript and UI logic, provide interfaces for calling the mobile SDK, and support accessing the client/offline database and running the offline mobile application. The graphical user interface allows end users to easily install and run the Appeon mobile application from Appeon Server.

Appeon Workspace can be distributed as a native mobile app thru the online app stores (such as Apple App Store, Google Play) or over-the-air, and it is also automatically included when you package and compile the Appeon mobile application as the iOS application archive (IPA) file or Android application package (APK) file.

The following diagram illustrates the Appeon Workspace architecture.

Figure 2.1: Appeon Workspace architecture
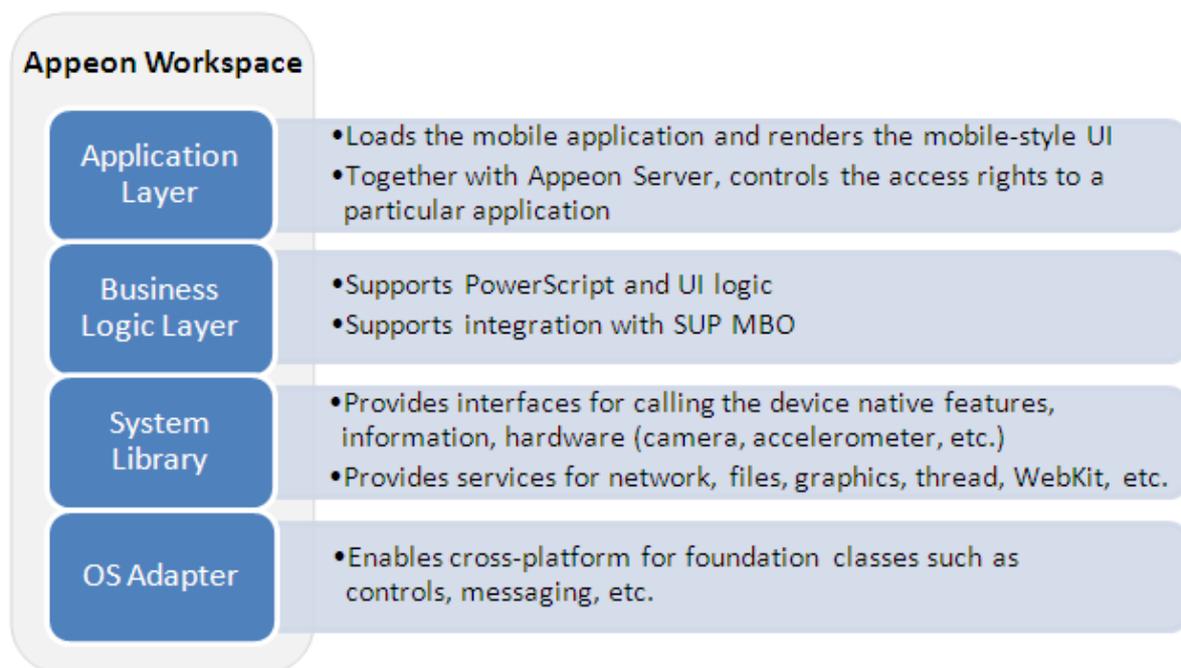
The UI of Appeon Workspace on iPad:

Figure 2.2: Appeon Workspace on iPad:

The UI of Appeon Workspace on iPhone:

Figure 2.3: Appeon Workspace on iPhone:
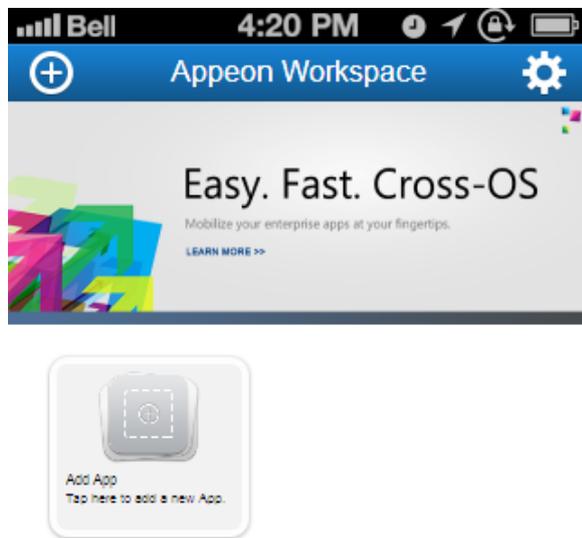
2.2 Why use Appeon Workspace

Appeon Workspace is an alternative method for distributing the native mobile application. In summary, the Appeon native mobile application can be distributed and accessed in the following two ways:

1. Traditional methods for pure native applications

   By building Appeon mobile applications to standard iOS application archive (IPA) file or Android application package (APK) file, the following distribution strategies can be used:

   a. End-users can perform the installation wirelessly by using a direct URL.

   b. IT administrators can use a private MDM server to instruct managed devices to install the native mobile app automatically.

   c. Developers can upload and distribute publicly via the online app stores, such as the Apple App Store, Google Play, etc.

2. Special method provided by Appeon -- Appeon Workspace

   Developers only need to deploy the Appeon native mobile applications to Appeon Server via the Appeon Developer toolbar. End users will first download and install Appeon Workspace to the device, and then download, install and run the Appeon native mobile application in Appeon Workspace.

Appeon Workspace is highly recommended over the traditional methods, because it has the following advantages:

Advantage 1: Simplify distributing and running applications

The traditional methods aforementioned are commonly recognized as time-consuming and cumbersome; especially the 3rd method, though most widely used now, it puts the application through lengthy approval process, and it poses high risk of being rejected. Besides that, each OS vendor runs their own online app stores and follows their own rules and procedures to approve applications, developers will need to spend tremendous time and efforts getting the application approved in each of these stores.

Appeon Workspace will connect to the Appeon Server, and download, install, and run the Appeon mobile apps, as illustrated in the following diagram:

1. Developers publish Appeon Workspace to the online app stores or distribute Appeon Workspace over-the-air (such as via email or Web site);

2. Developers deploy their mobile apps to the application server;

3. End users first install Appeon Workspace on their devices and then add and run the deployed Appeon mobile apps in Appeon Workspace.

Figure 2.4: Appeon Workspace workflow
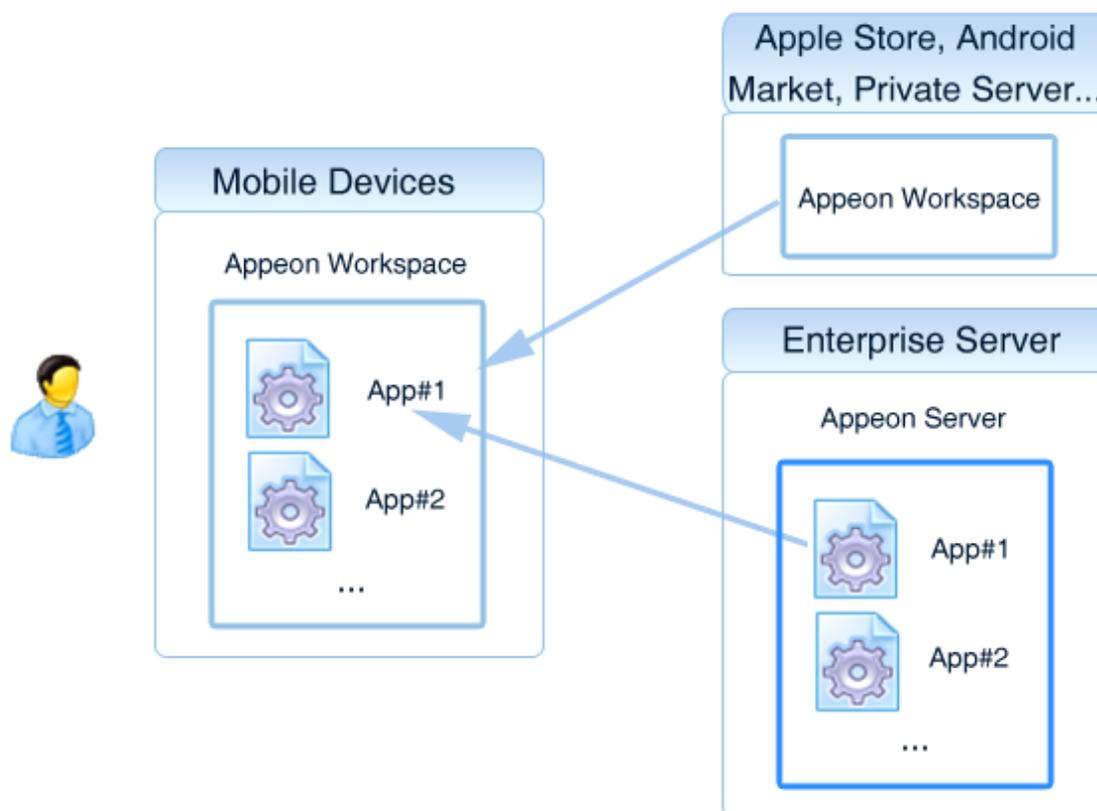
Advantage 2: Facilitate application upgrade (especially for apps hosted as SaaS)

Reason is mostly the same as described above. Without needing to build and distribute the IPA or APK file, developers only need to deploy the mobile apps to Appeon Server by using the Appeon Developer toolbar. When Appeon Workspace runs the mobile apps, it will automatically check for the update and upgrade the application.

Advantage 3: Securely manage applications

Appeon Workspace allows users to manage the access rights of a particular mobile app according to user groups. Once the administrator turns on Appeon Workspace security in AEM, the end user will need to register their Appeon Workspace ID in AEM before they can access the application in Appeon Workspace.

Advantage 4: Facilitate application debug

Appeon Workspace generates detailed log information to help analyze and debug application errors. End users can turn on or off the logging feature according to their actual needs.

Advantage 5: Support Mobile + Multi-Cloud runtime environment

Appeon Workspace turns Mobile + Cloud and even Mobile + Multi-Cloud into reality. Appeon supports the mainstream cloud services, therefore, developers only need to deploy the mobile application to any cloud-based server, and end users can connect to different cloud servers in Appeon Workspace.

2.3 Features

2.3.1 Supporting multiple OS and devices

Appeon Workspace is designed to run on various mobile OS and mobile devices. See the following table for details.

Table 2.1: Supported OS and devices

Supported OS	Supported devices	Available in
iOS	iPad 2, iPad 3, iPad 4, iPad mini, iPhone 4/4S, iPhone 5, iPod Touch 4, and iPod Touch 5	Version 1.0 & 1.5
Android OS	Android-based smartphones and tablets	Version 2013 R2
Windows Phone	Windows-Phone-based smartphones and tablets	Version 2014

2.3.2 Hosting multiple native mobile apps

You can add as many apps as you like to Appeon Workspace, with the application icon, name, and a brief application description displaying on the Appeon Workspace home screen. This adds better recognition and access to your Appeon Mobile apps. You can flick with your fingers to slide from screen to screen on your device to view your apps when there is more than one screen apps listed on the Appeon Workspace home screen. For detailed instructions on adding/closing/editing/deleting the applications in Appeon Workspace, refer to Running apps in Appeon Workspace.

2.3.3 Displaying in portrait and landscape

Appeon Workspace can be viewed in either portrait or landscape orientation -- you just rotate the device to change the orientation. By default, it is initially displayed in the orientation you hold your device.

2.3.4 Adding extra security to applications

Appeon Workspace adds extra security to applications. In AEM (Appeon Enterprise Manager), you can configure whether a user (an Appeon Workspace Client ID) has access to a particular application. For details, refer to Section 5.3.5.2, "User Management" in *Appeon Server Configuration Guide for .NET*, Section 5.3.5.3, "Group Management" in *Appeon Server Configuration Guide for .NET*, and Section 5.4.9, "Client Security" in *Appeon Server Configuration Guide for .NET* or those sections in Appeon Server Configuration Guide for J2EE.

Also, in Appeon Workspace, you can enable the **SSL Verify Peer** option to make the access to applications safer. For details, refer to Validating server SSL certificate.

2.3.5 Providing configurations to applications

Appeon Workspace provides a number of configuration options to the mobile application, such as the server connection timeout, the display of titlebar, the display of the advertisement banner, languages, logs etc. For details, refer to <u>Configuring Appeon Workspace</u>.

2.3.6 Customizing Appeon Workspace

Appeon Workspace are customizable. You can change Appeon Workspace into your own workspace by customizing the icons, UI texts, workspace banner, languages, etc., in Appeon Developer and publish it to online app stores or distribute it over-the-air. For details, refer to Section 11.4, "Customizing and packaging Appeon Workspace" in *Appeon Developer User Guide*.

2.3.7 Supporting offline applications

Appeon Workspace are capable of running offline applications deployed by Appeon Developer. For details, refer to Section 4.2.1.2.6, "Offline Settings" in *Appeon Developer User Guide*.

3 Installing Appeon Workspace

Two versions of Appeon Workspace are available to install: the **full version** and the **demo version**. The **full version** has every feature described in this document, while the **demo version** has almost every feature except for adding new apps, as it is for the sole purpose of demonstrating the Appeon demo applications.

To install the **full version** of Appeon Workspace on your iOS or Android device:

• Use your iOS or Android-powered mobile device to access **AEM** at *http://Server_IP_Address/AEM* or access the download page at *http://Server_IP_Address/AWS*, and click the corresponding link or button to install Appeon Workspace to your mobile device.

Figure 3.1: http://Server_IP_Address/AEM
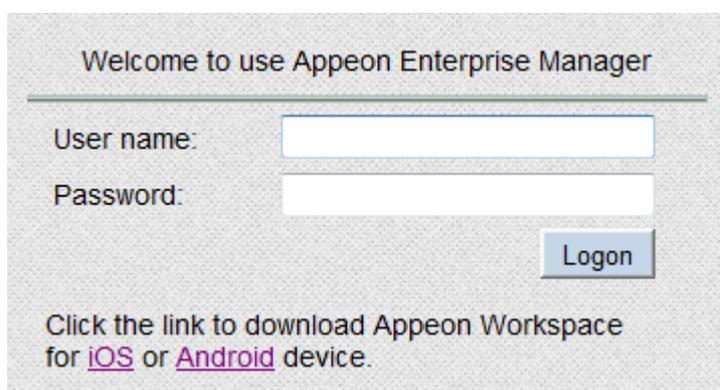
Figure 3.2: *http://Server_IP_Address/AWS*
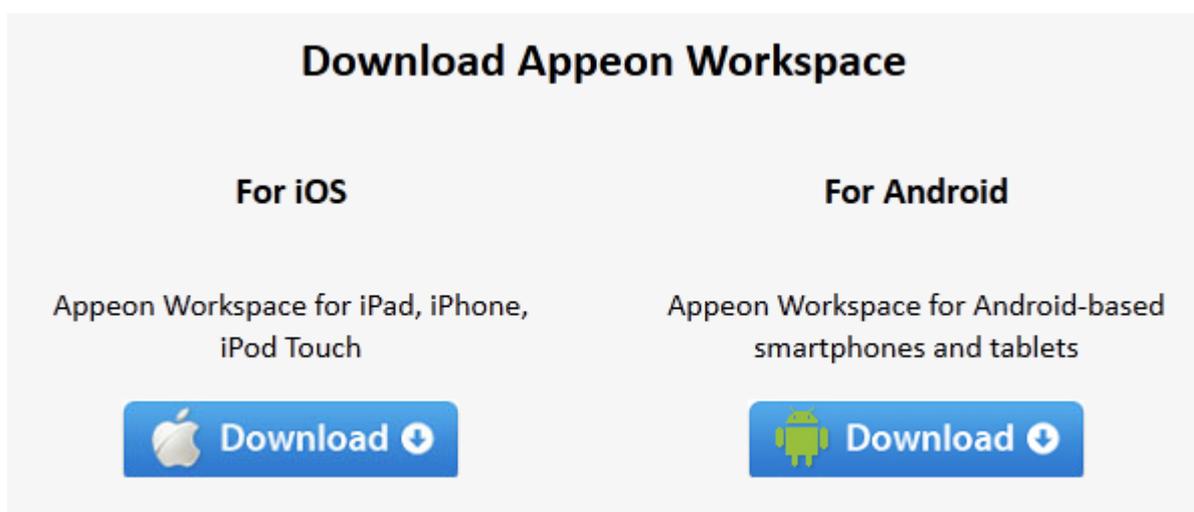
If you use one server as the Appeon Server and the Web server, the installation will go smoothly, especially for the .NET/IIS server. For the Java application server, you will need to deploy the Appeon Workspace app to the server first. Refer to Section 5.2.2.4, "Installing Appeon Workspace from AEM" in *Appeon Server Configuration Guide for J2EE* for how to deploy Appeon Workspace first and then you should be able to install it successfully.

However, if you want to set up a separate Web server rather than using the Appeon Server Web server for downloading the Appeon Workspace, you will need to follow the **HowTo.pdf** document under \%appeon_server_installation_directory%\aws\ (for example, C:\inetpub\wwwroot\appeon\aws\) to set up the Web server and then copy and configure the Appeon Workspace application packages.

You can also customize and package your own Appeon Workspace application and publish it to the online app store by following Section 11.4, "Customizing and packaging Appeon Workspace" in *Appeon Developer User Guide*.

To install the **demo version** of Appeon Workspace on your iOS or Android device:

• On the iOS mobile devices, open **App Store**, search for "appeon", and then tap **Install**. Alternatively, you can also download Appeon Workspace from the Apple App Store to your Windows PC or Mac, and then synchronize it to your iOS mobile device via iTunes.

• On the Android-powered devices, open **Google Play**, search for "appeon", and then tap **Install**.
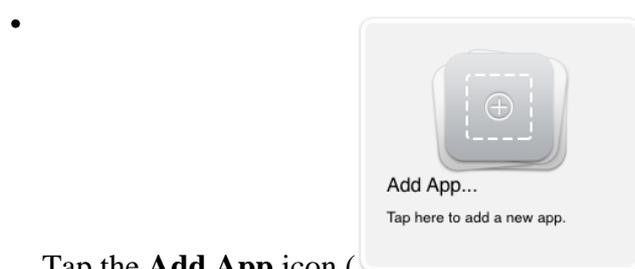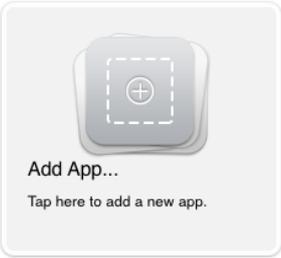
4 Running apps in Appeon Workspace

4.1 Adding applications

Appeon Workspace provides several ways to add applications.

Step 1: Use one of the following methods to open the **Add App** screen.

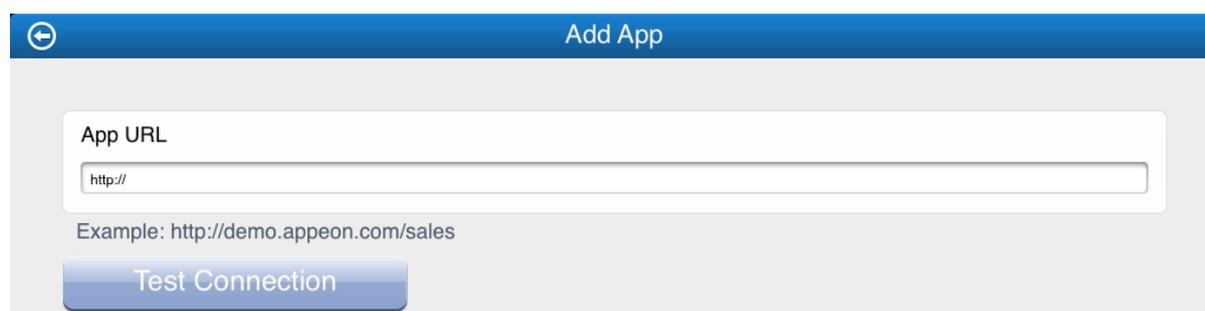- Tap the add icon () on the left of the titlebar; or

- Tap the **Add App** icon () (only available when there is no apps installed) in the data area; or

- Tap the settings icon () on the right of the titlebar, then tap the **Settings** option on the popup menu, and then tap the **Add App** option.

The **Add App** screen appears, as shown in the following figure.

Figure 4.1: Add a new app

Step 2: In the **App URL** text box, enter the application URL. A typical application URL looks similar to http://192.0.3.127:80/appname/.

Both HTTP and HTTPs are supported in Appeon Workspace running on mobile devices. But in Appeon Workspace Emulator on Windows, only HTTP is supported.

Step 3: Tap the **Test Connection** button to test the app URL connection. Make sure that the connection is successful.

Step 4: Tap the back icon () on the left of the titlebar to save the information and return to the previous screen.

Once the application information is saved successfully, the application will appear in the data area on the Appeon Workspace home screen, and will start the download and install process immediately, as shown in the following figure.

Figure 4.2: Download and install apps

The newly added applications will queue up and will be automatically downloaded and installed once the previous application is finished.

During the download and install process, you can pause and resume the process by tapping the ⚙ icon. For example, suppose you want to download and install application_2 first instead of application_1, you can pause the process for application_1 and tap application_2 to start the download and install process for application_2.

Figure 4.3: Apps line up to be installed

4.2 Running applications

Once the download and install process of the added application is complete, you are ready to access it in Appeon Workspace.

Tapping an application icon or name in the data area on the Appeon Workspace home screen will start to run the application. Applications in running will be listed in the task bar (bottom area) on the home screen as a small application icon, as shown in the following figure.

Figure 4.4: Appeon Workspace task bar

More than one application can be run at the same time, but only one can be displayed in the foreground and be available for accessing.

In the task bar, you can flick with your fingers to slide from screen to screen to view more applications in running, if there is more than one screen (applications) listed.

Note: The task bar will not show if there are no running applications. If you have not pinned

it by tapping the pin icon (   ), it will be automatically hidden after it is shown for a few

seconds. Tap the Appeon Workspace titlebar or the very bottom of the device screen on the Appeon Workspace home screen to show the task bar if it is hidden.

4.2.1 Running apps in full screen

You can tap the hide titlebar icon ( ) on the right of the titlebar to view the application in full screen (without the titlebar) at runtime, as shown in the following figure.

**Figure 4.5: Window with titlebar hidden**
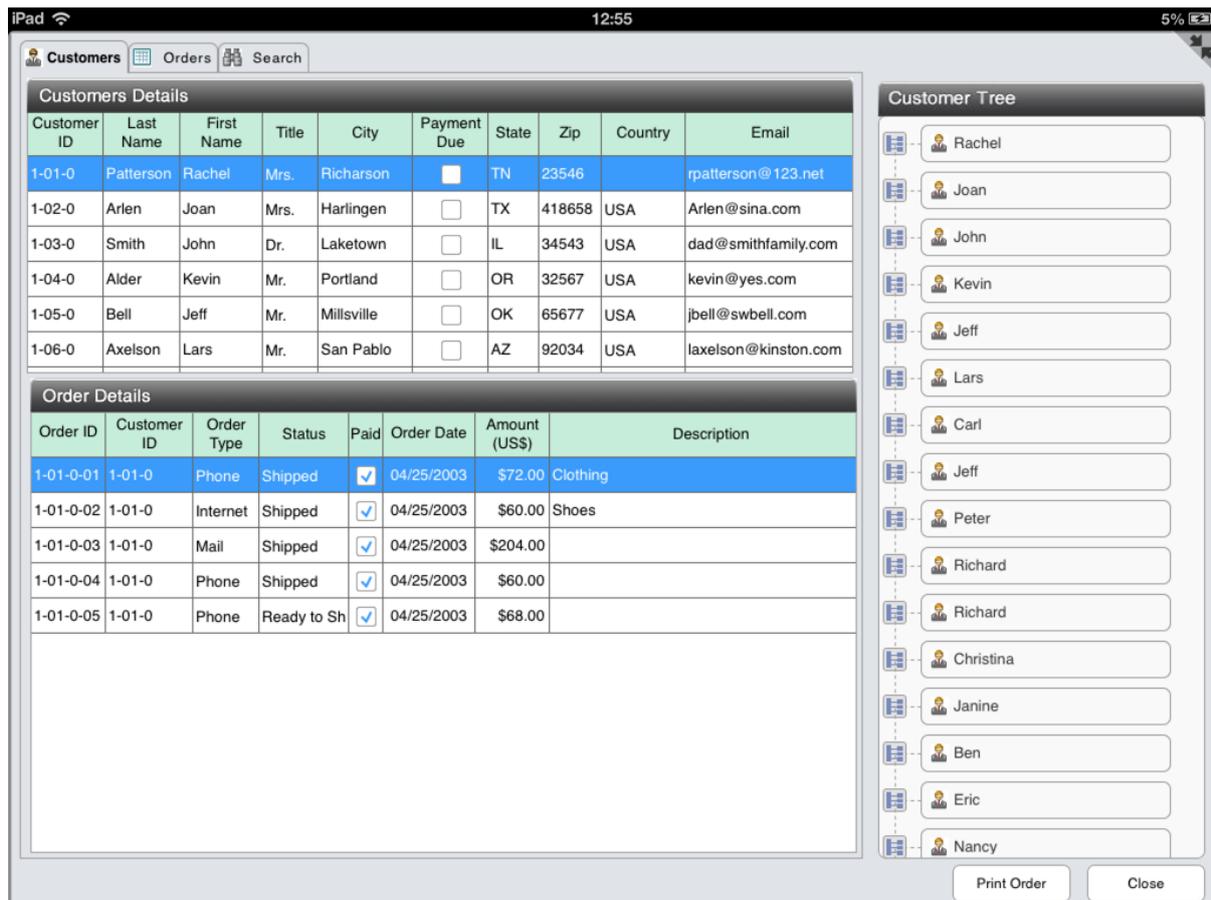
Tap the show titlebar icon ( ) on the top right corner of the window to return to the normal view.

If the **App Titlebar** option under **General** is turned off (it is turned on by default), the application will run without the titlebar as it is opened.

4.2.2 Bringing applications to foreground

When you tap the home icon ( ) on the left of the titlebar to quit the application and return to the Appeon Workspace home screen, the application will remain in the background, and will be listed in the task bar. When you tap the application icon in the task bar, the application will be brought to the foreground again, and become visible for your manipulation.

Figure 4.6: Appeon Workspace task bar
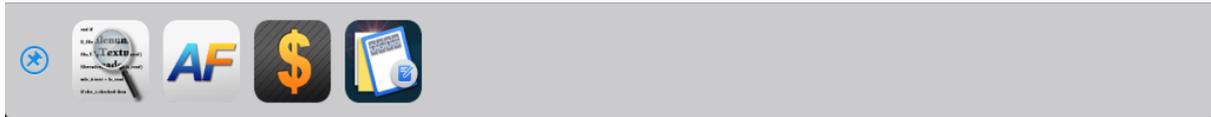
4.3 Closing applications

To completely remove the application from memory, you will need to exit the application from the background, by one of the following ways:

*
    Method 1: Close the application using the close app icon () on the application titlebar.

    Tap the close app icon on the app titlebar and tab **OK** in the popup dialog box to close the app.

    You can hide the close app icon using the of_setcloseappiconvisible function in *Workarounds & API Guide*.

* Method 2: Close the apps in the task bar.

    Step 1: Press and hold any application icon in the task bar until a red close sign () appears on the upper left corner of each application icon, as shown in the following figure.

   **Figure 4.7: Applications to be closed**
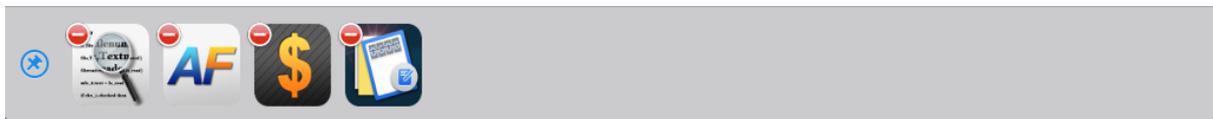
    Step 2: Tap the close sign of the application you intend to close. The application is then closed.

* Method 3: Close the application using the close option in the application.

    Alternatively, if the application provides the close option in the window list icon (as shown in the figure below), you can also tap the close option to exit the application from the memory.

    Figure 4.8: Close option under settings
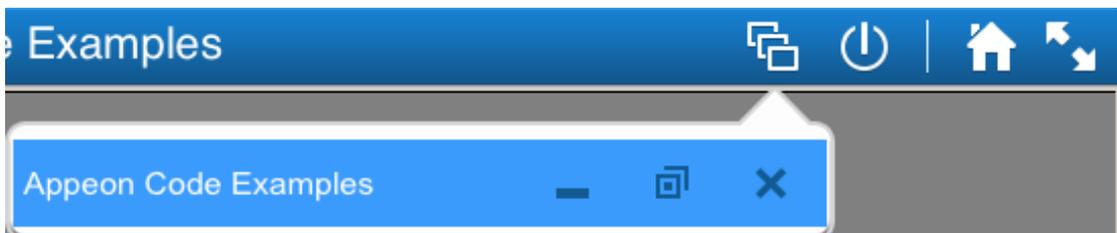
* Method 4: Close all the running apps (both in the foreground and background) at once.

    Tap the settings icon () on the titlebar, and then tap the **Close All Apps** option.

Figure 4.9: Close all apps
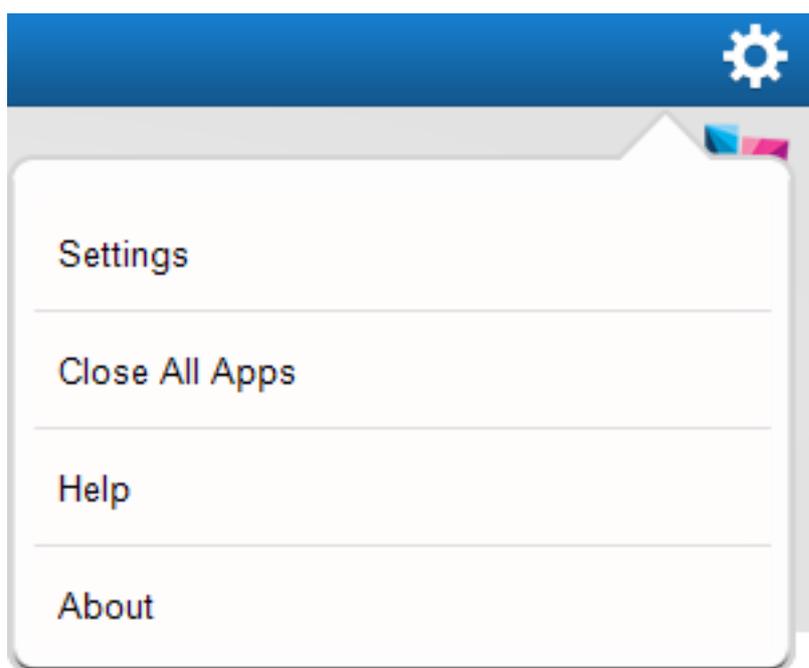
4.4 Editing applications

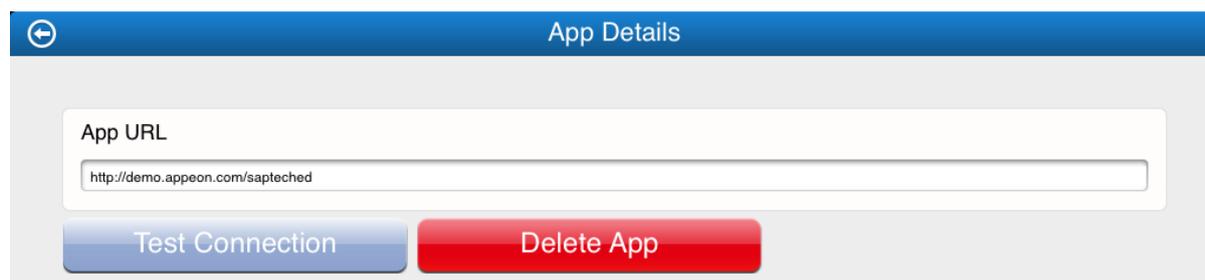Appeon Workspace provides capabilities to edit the application URLs.

To edit an application, do the following:

Step 1: Tap the settings icon ( ) on the titlebar, and then tap the **Settings** option in the menu that appears.

Step 2: In the **Installed Apps** list on the **Settings** screen, tap the application name and URL you want to revise, as shown in the following figure.

Figure 4.10: Editing the app settings

Step 3: On the **App Details** screen that appears, make the revision according to your needs.

Figure 4.11: Editing a certain app URL

Step 4: Tap the **Test Connection** button.

Step 5: Tap the back icon () on the titlebar to return. The changes you made will be automatically saved.
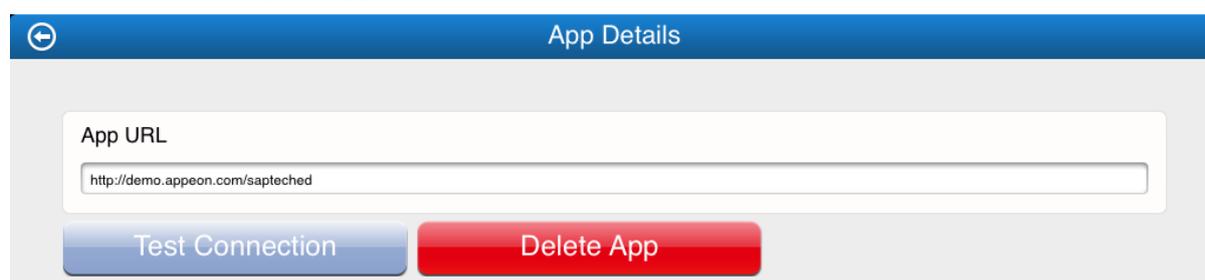
4.5 Deleting applications

To delete an application from Appeon Workspace, do the following:

Step 1: Tap the settings icon () on the titlebar, and then tap the **Settings** option in the menu that appears.

Step 2: In the **Installed Apps** list on the **Settings** screen, tap the application name and URL you want to delete, as shown in the following figure.

Figure 4.12: Deleting installed apps

Step 3: On the **App Details** screen that appears, tap the **Delete App** button, and then in the popup **Delete App** dialog box, tap **OK** to confirm the deletion.

Figure 4.13: Deleting the app

The application is then deleted from Appeon Workspace and the device.

Note: Applications in running cannot be deleted.

5 Configuring Appeon Workspace

Appeon Workspace provides many configurations for the application, such as App Titlebar,

Logging, etc. Go to the **General** screen by tapping the settings icon (⚙️) > **Settings** > **General**, and the **General** screen appears, as shown in the following figure.

Figure 5.1: General
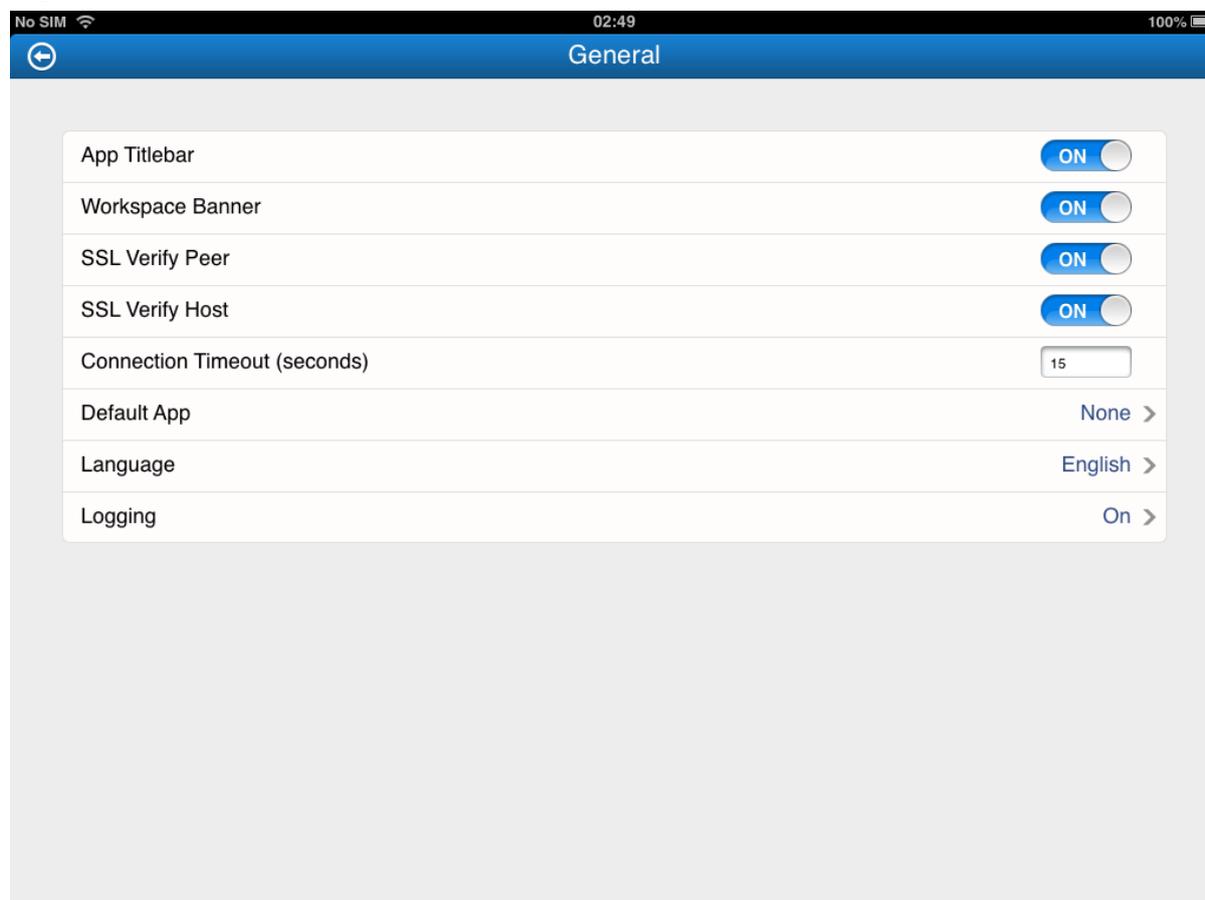
5.1 Showing or hiding app titlebar

On the **General** screen, tap the **App Titlebar** (**ON/OFF**) button to show or hide the application titlebar. If it is **OFF**, the application titlebar will be hidden automatically when you access your mobile applications.

**Figure 5.2: Showing or hiding titlebar**

After you make changes to this setting, you will need to restart the application to make the new setting effective.

5.2 Showing or hiding workspace banner

On the **General** screen, tap the **Workspace Banner (ON/OFF)** option to show or hide the workspace banner.

Figure 5.3: Displaying banner

If it is **OFF**, the workspace banner will be hidden from the Appeon Workspace home screen, as shown in the following figure.

Figure 5.4: Advertisement bar is hidden
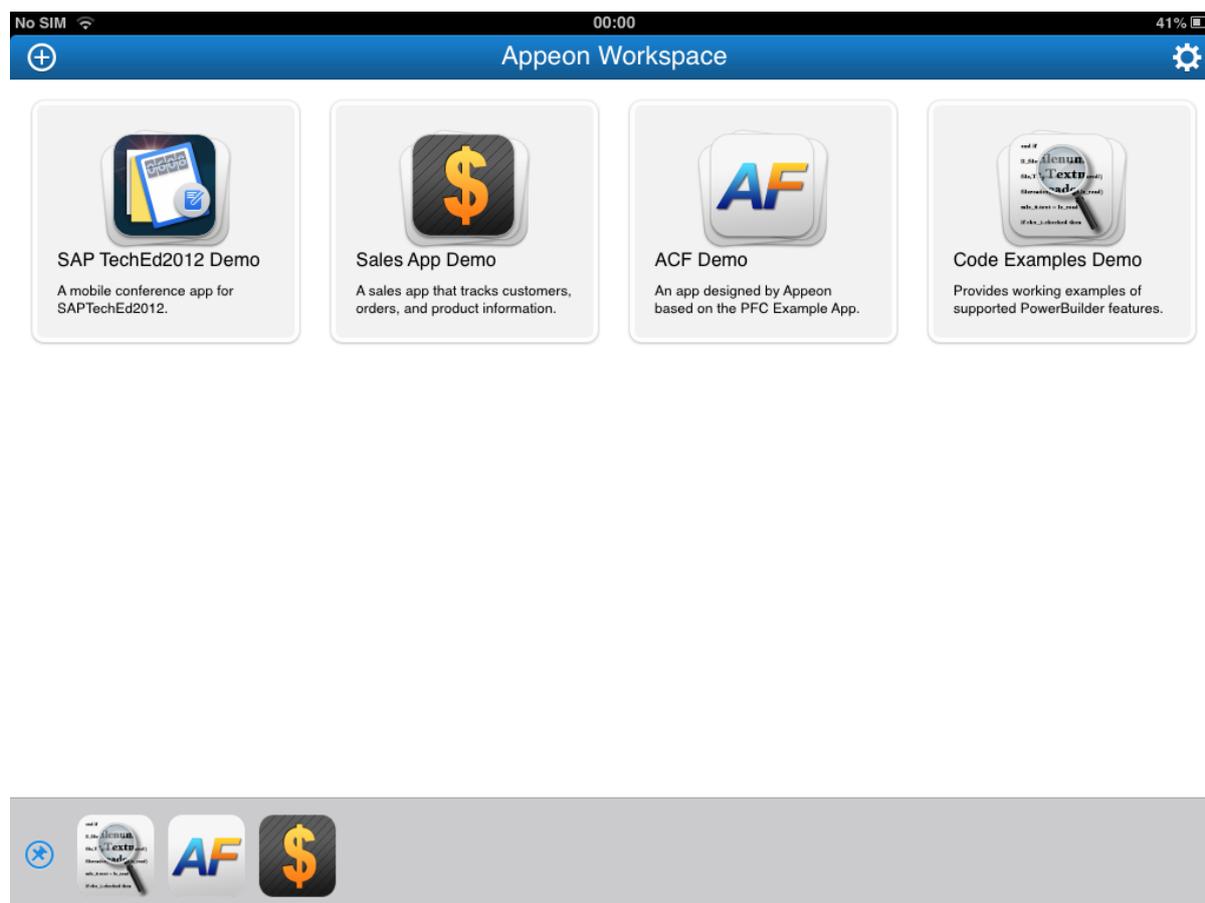
5.3 Validating server SSL certificate

Appeon Workspace provides options for the client to authenticate the SSL certificate of the server.

On the **General** screen, tap the **SSL Verify Peer** (**ON/OFF**) option to enable or disable it, as shown in the following figure. **SSL Verify Peer** determines whether to verify the authenticity of the server SSL certificate.

Figure 5.5: SSL verify peer

If you have enabled this option, the client will get the SSL certificate from the server and check the signature, validity period, issuer etc. to determine whether it is a valid certificate. If the certificate is invalid, the communication will be terminated immediately.

5.3.1 Verifying SSL host

The **SSL Verify Host** option ensures the host name in the URL to which the client connects matches the common name in the server SSL certificate. It will be available when **SSL Verify Peer** is enabled.

On the **General** screen, tap the **SSL Verify Peer** (**ON/OFF**) option to enable or disable it, as shown in the following figure.

Figure 5.6: SSL verify host

If you have enabled this option, when an unmatched host name is detected, the communication will be terminated immediately.

5.4 Configuring connection timeout

Appeon Workspace provides the option to configure timeout settings for applications connecting to corresponding servers. If the application cannot connect to the corresponding server successfully within the specified time, users will be prompted.

On the **General** screen, type any number in the **Connection Timeout (seconds)** text box to set the timeout. By default, it is 15 seconds.

Figure 5.7: Connection Timeout


5.5 Specifying default application

You can specify an application as the default app, so when Appeon Workspace is opened, this application will be automatically run in Appeon Workspace.

To set an application as the default app:

Step 1: On the **General** screen, tap **Default App**.

All of the added applications will be listed, including a **None** option.

**Figure 5.8: Setting up Default application**
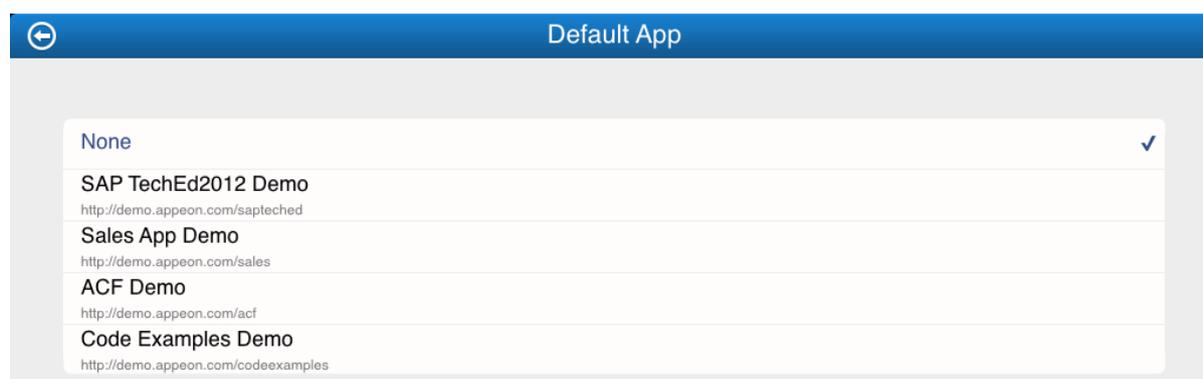
Step 2: Tap the application you want to set as the default app, or tap **None** if you do not want any application to run as the Appeon Workspace opens.

5.6 Configuring UI languages

To configure the Appeon Workspace UI language, tap the **Language** option on the **General** screen, and then select a language you prefer from the language list on the **Language** screen that appears.
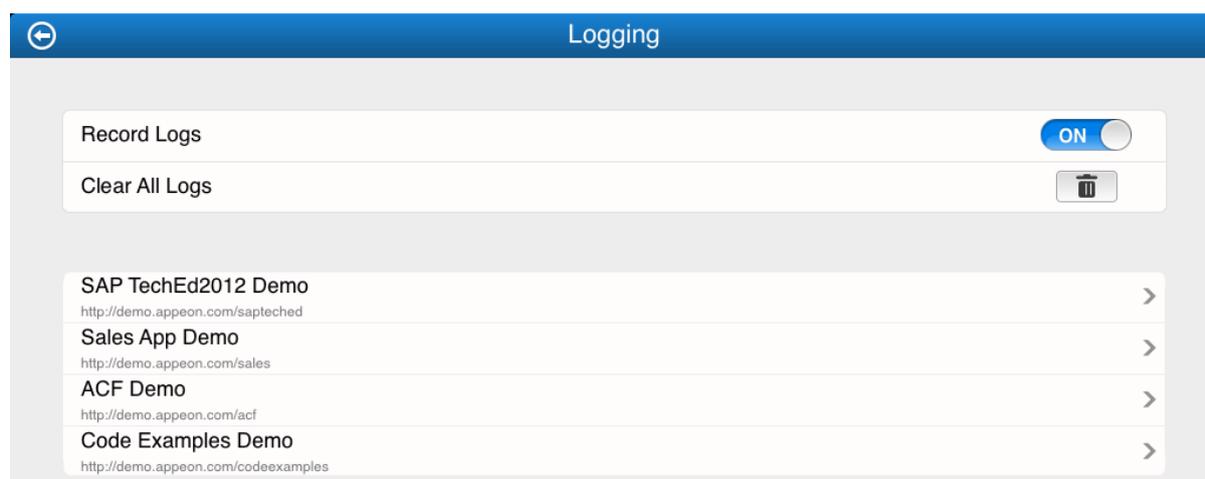
Figure 5.9: Language settings
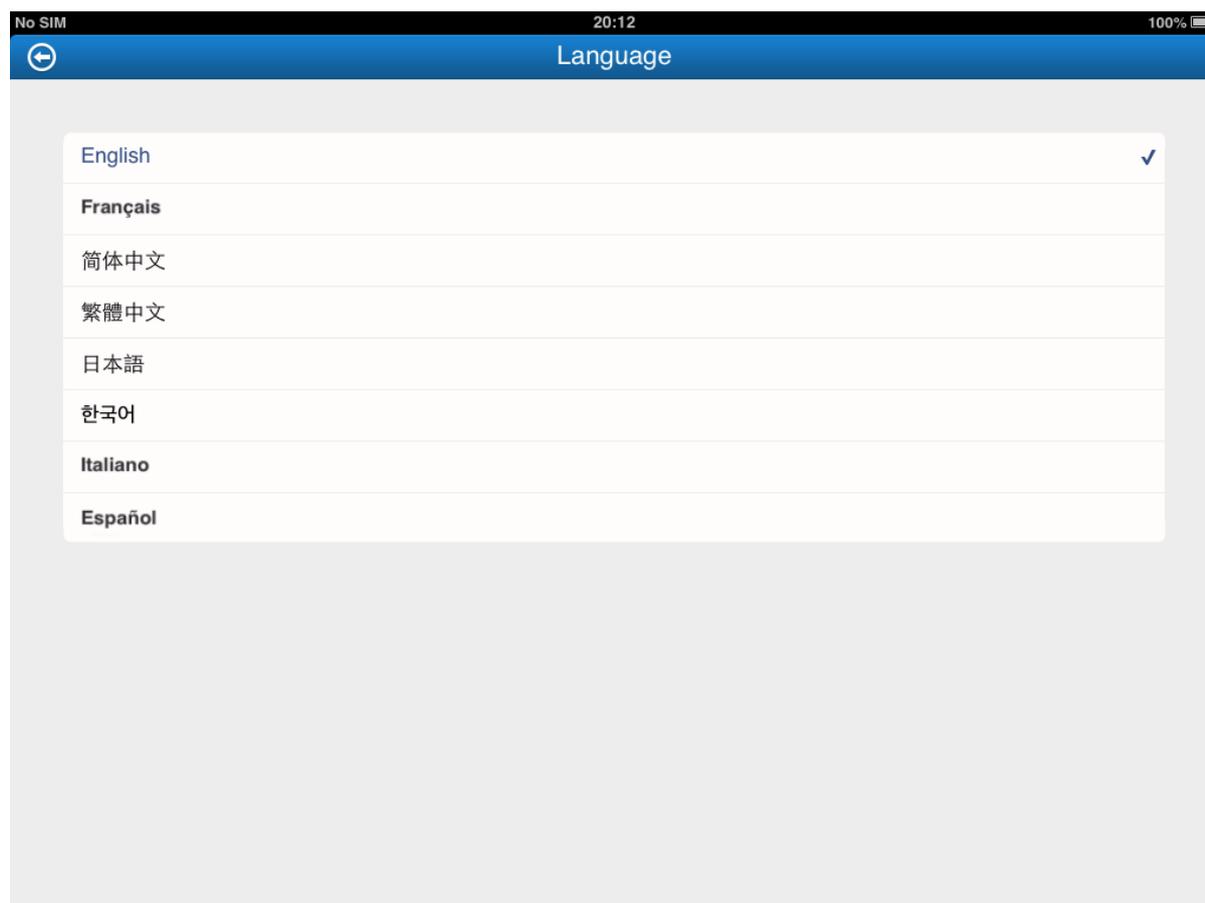
5.7 Configuring logs

Appeon Workspace provides several configuration options for managing logs.

On the **General** screen, tap the **Logging** option to configure the relevant log settings.

Figure 5.10: Logging

See the following table for details on each option.

Table 5.1: Log settings

Items	Descriptions
Record Logs	Enable it to record application logs on your mobile device.
Clear All Logs	Tap it to clear all logs recorded on your device.

Note: The log settings (options) will only be available for configuration on the condition that one of the log modes (except the **OFF** mode) is enabled in AEM. See Section 5.4.6.8, "Client Logs" in *Appeon Server Configuration Guide for .NET* or in Appeon Server Configuration Guide for J2EE for details.

You can also configure logs for a particular app on the same screen. In this section, we take the app *SAP TechEd2012 Demo* as an example.

Step 1: Tap the application name *SAP TechEd2012 Demo*, and the **App Logs** screen appears, as shown in the following figure.

Figure 5.11: Log settings for an app
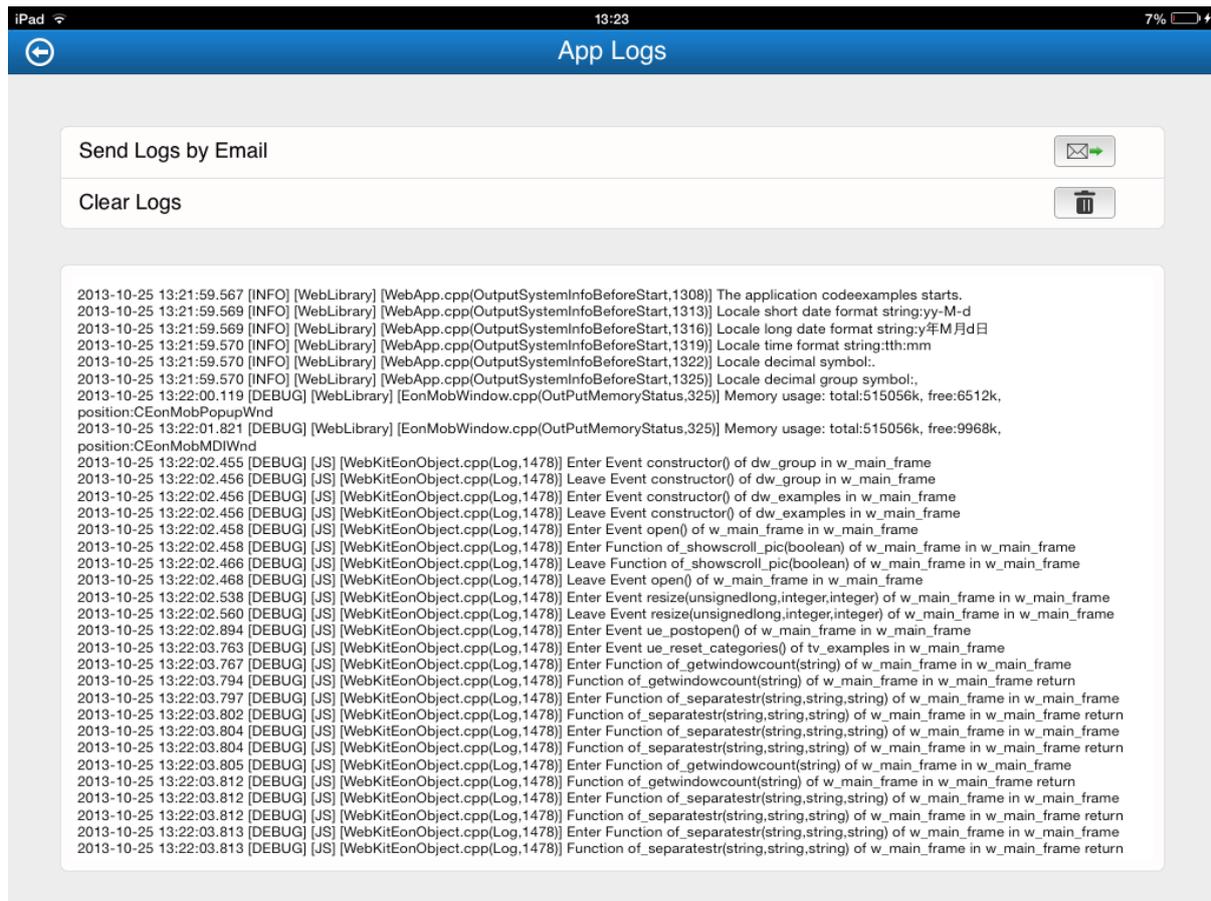
Step 2: Do one or both of the following:

- **Send Logs by Email**: tap the send logs by email icon (   ) to send the application logs via email as attachments.

- **Clear Logs**: tap the clear log icon (   ) to clear the logs for the application.
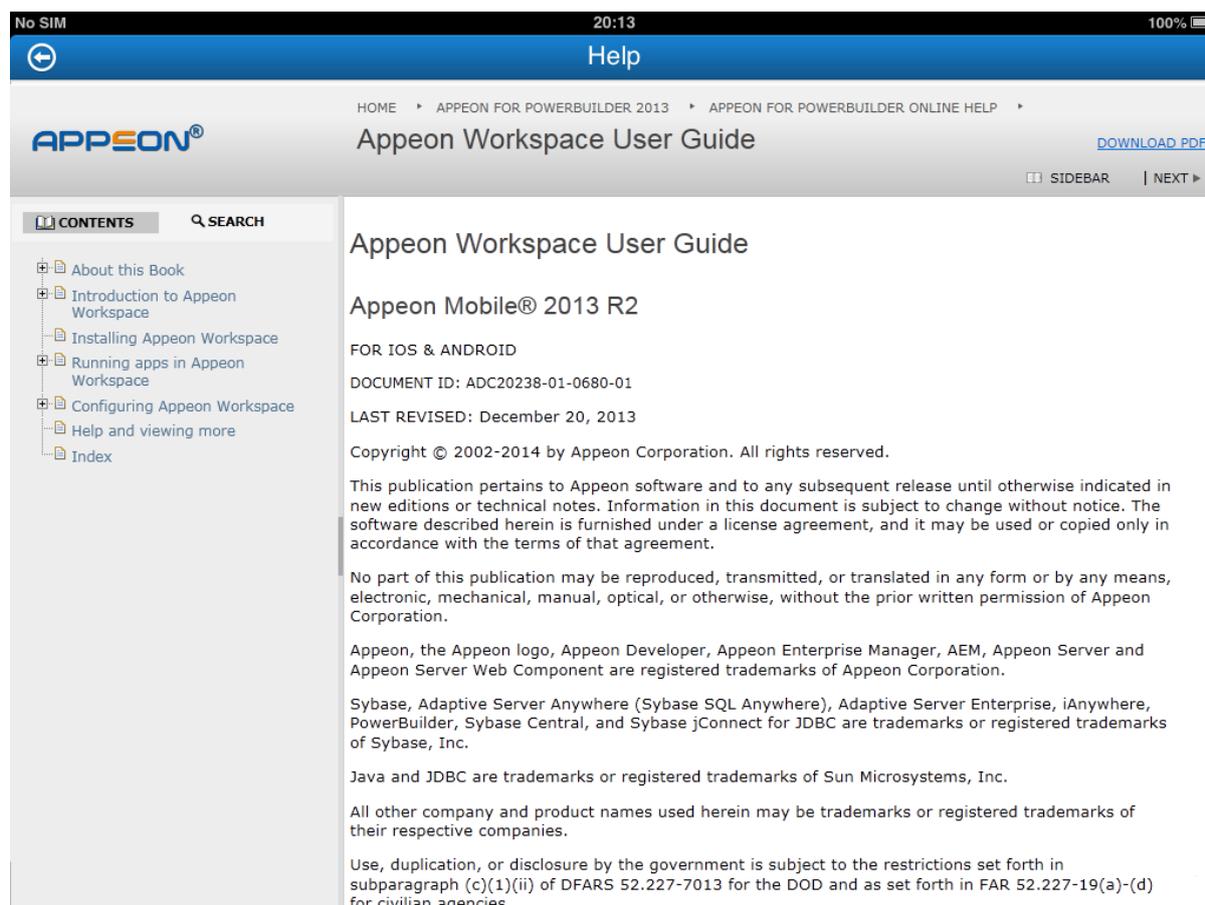
6 Help and viewing more

There are a few other options under the settings icon (![gear icon]):

Help is to search for help about Appeon Workspace.

Figure 6.1: Appeon Workspace help

About is to view copyright information and the Appeon Workspace ID.

Figure 6.2: Appeon Workspace about

If you have enabled the Appeon Workspace security for a particular application in AEM, you will need to register the Appeon Workspace ID in AEM in order to have access rights to the application. For details, refer to Section 5.4.9.2, "Appeon Workspace" in *Appeon Server Configuration Guide for .NET* or in Appeon Server Configuration Guide for J2EE.

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