Appeon Workspace User Guide

PowerServer Mobile® 2020

FOR IOS & ANDROID

Contents

1 Introduction to Appeon Workspace

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

1.1 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 PowerServer mobile application from PowerServer.

Appeon Workspace is a free native mobile application which can only be distributed internally or privately. It is also included as an invisible component when you package and compile the PowerServer mobile application as the iOS application archive (IPA) file or Android application package (APK) file.

The following diagram illustrates the Appeon Workspace architecture.

Figure 1.1: Appeon Workspace architecture
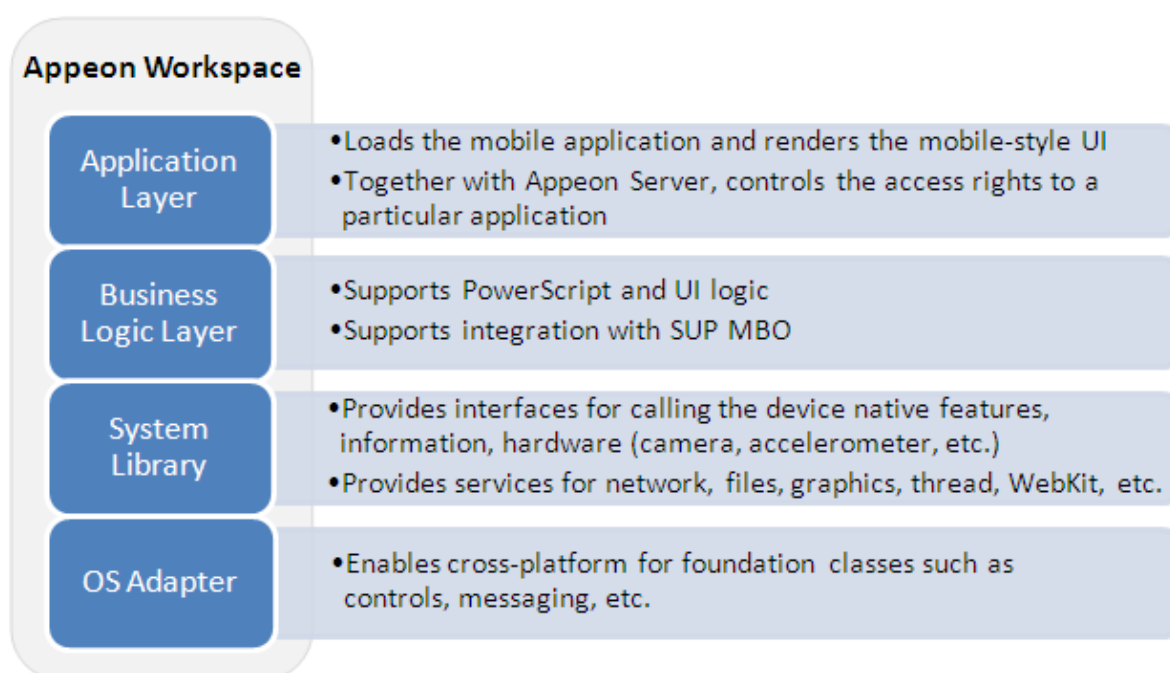
The UI of Appeon Workspace on iPad:

Figure 1.2: Appeon Workspace on iPad

The UI of Appeon Workspace on iPhone:

Figure 1.3: Appeon Workspace on iPhone
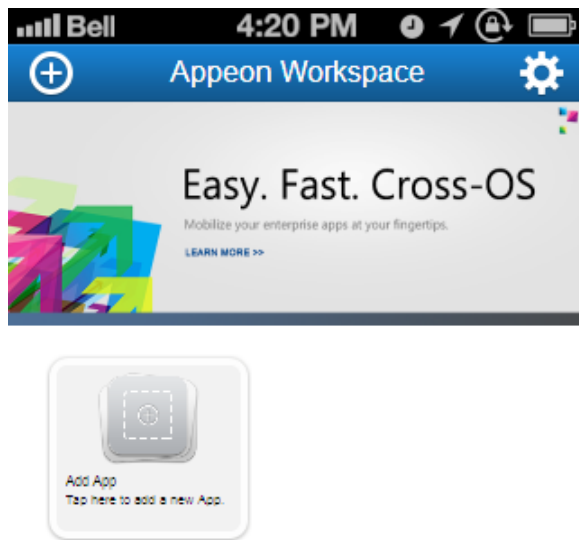
1.2 Why use Appeon Workspace

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

1. Traditional methods for pure native applications

   By building the PowerServer mobile application 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 PowerServer -- Appeon Workspace

   Developers only need to deploy the PowerServer native mobile applications to PowerServer via the PowerServer Toolkit. End users will first download and install Appeon Workspace to the device, and then download, install and run the PowerServer 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 PowerServer, and download, install, and run the PowerServer mobile apps, as illustrated in the following diagram:

1. Developers 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 PowerServer mobile apps in Appeon Workspace.

Figure 1.4: Appeon Workspace workflow
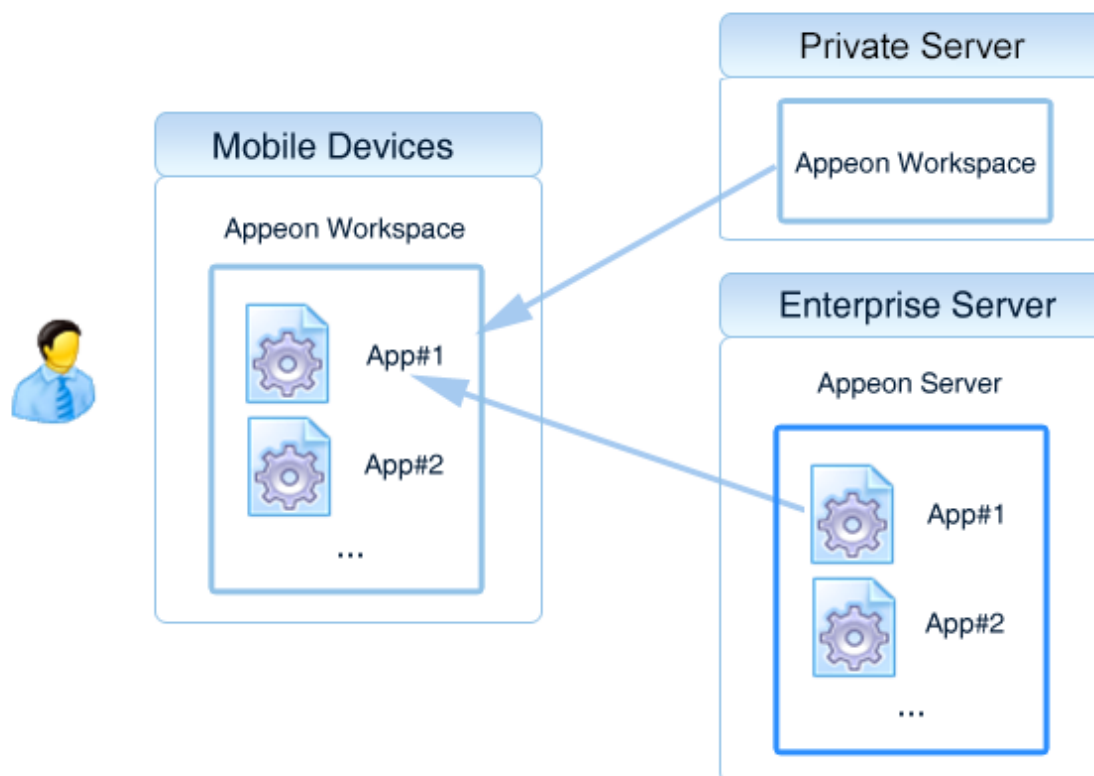
Advantage 2: Facilitate application upgrade (especially for apps hosted as SaaS)

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 PowerServer by using the PowerServer Toolkit. 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. PowerServer 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.

1.3 Features

1.3.1 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 1.1: Supported OS and devices

Supported OS	Supported devices	Available in
iOS	iOS devices including iPad Mini/Air, iPad Pro, and iPhone	Version 1.0 & 1.5
iOS, Android OS	iOS devices and Android-based smartphones and tablets	Version 2013 R2 and later

1.3.2 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 PowerServer 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.

1.3.3 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.

1.3.4 Adding extra security to applications

Appeon Workspace adds extra security to applications. In AEM, you can configure whether a user (an Appeon Workspace Client ID) has access to a particular application. For details, refer to Section 4.3.5.2, "User Management" in *PowerServer Configuration Guide for .NET*, Section 4.3.5.3, "Group Management" in *PowerServer Configuration Guide for .NET*, and Section 4.4.9, "Client Security" in *PowerServer Configuration Guide for .NET* or those sections in PowerServer 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.

1.3.5 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 Configuring Appeon Workspace.

1.3.6 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 PowerServer Toolkit and publish it to online app stores or distribute it over-the-air. For details, refer to Section 9.3, "Customizing and packaging Appeon Workspace" in *PowerServer Toolkit User Guide*.

1.3.7 Supporting offline applications

Appeon Workspace are capable of running offline applications deployed by PowerServer Toolkit. For details, refer to Section 3.2.1.2.6, "Offline Settings" in *PowerServer Toolkit User Guide*.

2 Installing Appeon Workspace

2.1 Preparations (for server administrator only)

The following sections are for the developer or server administrator only, not for the end user. If you are an end user, you can skip this section.

2.1.1 Configuring SSL certificate (for iOS only)

Starting from iOS 7.1, Apple requires enterprise apps to be installed through HTTPS only. Install through HTTP will fail on iOS 7.1 or later devices. Therefore, you will have to install and configure the SSL certificate on the Web site that hosts Appeon Workspace, in order for Appeon Workspace to be installed successfully on all iOS devices.

If no SSL certificate is configured on the Web server, then one possible way to install Appeon Workspace on the iOS device is to download Appeon Workspace to the PC first, and then synchronize it from the PC to the iOS device using iTunes.

For more details or other possible solutions, refer to Section 1.3.1, ""Cannot install application because the certificate for *** is not valid" when installing Appeon Workspace on iOS 7.1 or later device" in *PowerServer Troubleshooting Guide*.

2.1.2 Configuring the Appeon Workspace download center

After the Appeon Workspace app is created, you can follow this section to post the Appeon Workspace app files to a Web site and then create the Appeon Workspace download center from the template provided by PowerServer.

You can choose to post the Appeon Workspace app to the PowerServer which is a readily-used Web site for the Appeon Workspace app, if you decide to go this way, you can skip Step 1 and directly start from Step 2.

Step 1: Set up a Web site for hosting the Appeon Workspace app files.

1. Install IIS or Apache. The third-party Web server is recommended to be IIS 7.5 - 10 or Apache 2.x.

2. (For IIS only) Configure the MIME types for the IIS Web site.

    In the IIS Manager, add the following MIME types:

    Extension: .apk **MIME Type**: application/octet-stream

    Extension: .ipa **MIME Type**: application/octet-stream

    Extension: .plist **MIME Type**: text/xml

Step 2: Copy the Appeon Workspace app files to a location on the web site that is accessible to the users; or upload the files to PowerServer via AEM (for details, see Section 4.4.10, "Mobile App Distribution" in *PowerServer Configuration Guide for .NET*).

• For the Android installation, copy the *.apk file

• For the iOS installation, copy the *.ipa, *.plist, and *.png files

Suppose the same file name is used for .apk file, .ipa file and .plist file (for example, 8.0.0088.00), and the files are copied to the **aws** folder under the Web root directory of the Web site, and the Web site HTTPS URL is: https://192.0.3.111:7000, then the URL to the above files is:

- https://192.0.3.111:7000/aws/8.0.0088.00.apk

- https://192.0.3.111:7000/aws/8.0.0088.00.ipa

- https://192.0.3.111:7000/aws/8.0.0088.00.plist

- https://192.0.3.111:7000/aws/appicon57.png

- https://192.0.3.111:7000/aws/appicon512.png

Step 3: (For iOS only) Modify the .plist file to point to the URL of the .ipa and .png files.

1. Locate the following line of script, and specify the URL of the .ipa file:

   Change

   ```
   <string>$ipa_url$</string>
   ```

   To

   ```
   <string>https://192.0.3.111:7000/aws/8.0.0088.00.ipa</string>
   ```

2. Locate the following two lines of script, and specify the URL of the icon files:

   Change

   ```
   <string>$appicon_512$</string>
   <string>$appicon_57$</string>
   ```

   To

   ```
   <string>https://192.0.3.111:7000/aws/appicon512.png</string>
   <string>https://192.0.3.111:7000/aws/appicon57.png</string>
   ```

Step 4: Copy the downloadaws.html file from \%powerserver_installation_directory%\aws\ (for example, C:\inetpub\wwwroot\appeon\aws\) to the same folder as the app files, and modify it to specify the URL of the .plist and .ipa files for iOS, and .apk file for Android.

For Android:

```
var android_web_server ='http://192.0.3.111:7000/aws/8.0.0088.00.apk';
```

For iOS (Notice that the URL to the .plist file must be an HTTPS URL):

```
var ios_mobile_url ='https://192.0.3.111:7000/aws/8.0.0088.00.plist';
var ios_web_url = 'http://192.0.3.111:7000/aws/8.0.0088.00.ipa';
```

Now the Appeon Workspace app is ready for download and installation on both the Android and iOS device.

Step 5: Send the URL of downloadaws.html to the end users, for example, https://192.0.3.111:7000/aws/downloadaws.html.

2.1.3 Deploying Appeon Workspace (for certain Java application server only)

If you set up one server as the application server and the Web server, and if PowerServer is installed to the .NET IIS server, JBoss, WebLogic (development mode), or JEUS, then the **built-in version** of Appeon Workspace is ready for installation without needing any additional configurations; but if PowerServer is installed to WebLogic (production mode) or WebSphere, then the built-in Appeon Workspace is not ready for installation, and you will need to deploy the Appeon Workspace app to the application server's Web server first. Detailed instructions are provided below.
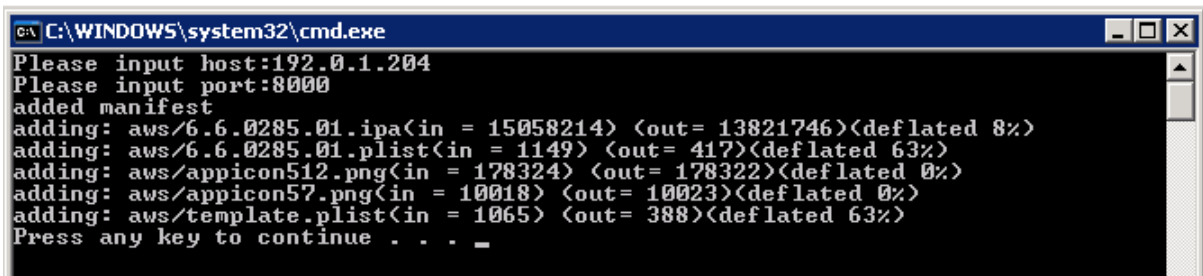
Step 1: Check if appeonmobile.war exists in the *%ApplicationServer_Home%\appeon* directory; if it does not exist, follow instructions below to generate the appeonmobile.war file. appeonmobile.war contains all of the files of Appeon Workspace.

a. On Windows, execute the **gen.bat** file in the *%ApplicationServer_Home%\appeon* directory, *%ApplicationServer_Home%* indicates the directory where you install the application server, for example, *C:\Program Files\wildfly-18.0.0.Final*.

   On Unix/Linux, execute the **gen.sh** file in the *AppeonAWS* folder of the installation package. On AIX OS, the GNU Bourne Again shell (Bash) is not installed by default. You would need to install Bash before you can execute gen.sh successfully in AIX.

b. In the command window, enter the IP address (for example, 192.0.1.204) and the port number (for example, 8000) of the current PowerServer, and then press the **Enter** key.

Figure 2.1: Generate the appeonmobile.war file in the command window

   After the commands are executed successfully, the appeonmobile.war file will be generated in the same directory with the gen.bat or gen.sh file.

Step 2: Deploy the appeonmobile.war file.

Deploy the appeonmobile.war file to the application server just as how you deploy the other applications.

   Deploying appeonmobile.war to the WebSphere application server

   If you deploy the appeonmobile.war file to the WebSphere application server, make sure to keep **Context Root** the same as the name of the appeonmobile.war file (which is **appeonmobile** as shown in the following figure), otherwise there may be errors that you could not download the Appeon Workspace IPA (iOS) or APK (Android) file.

Figure 2.2: Set Context Root to appeonmobile
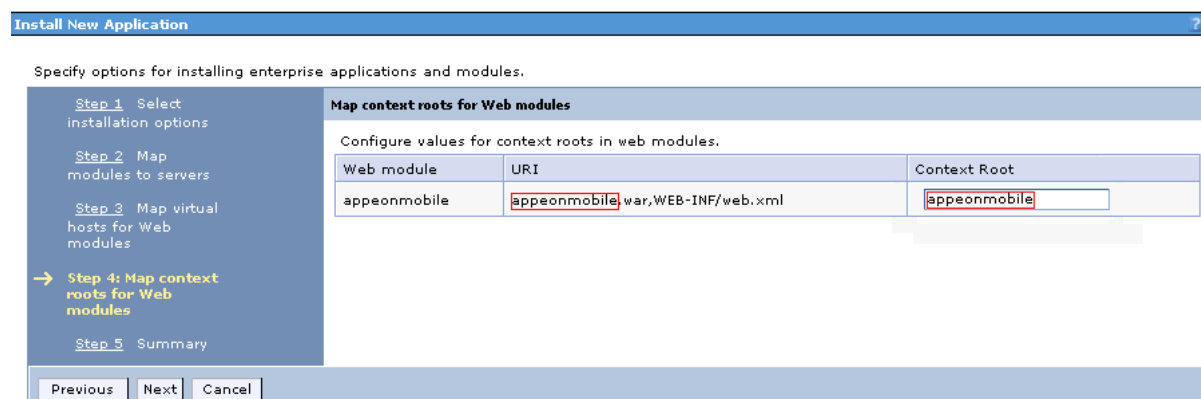
2.1.4 Troubleshooting

This section lists several errors that may occur during the preparing and installing process.

1. There is an error saying "'jar' is not recognized as an internal or external command, operable program or batch file.", during executing the commands entered, as shown in the following figure.

    Cause: This is because the corresponding environment variable is not configured.

    Solution: Right-click **Computer**, choose **Properties** > **Advanced system settings** > **Advance** > **Environment Variables**, find and select **Path** in the **Variable** column of the **System variables** group box, then click **Edit...** to add the path "*C:\Program Files\Java\jdk1.6.0_24\bin*" to it (make sure to change the jdk version "1.6.0_24" to the version you actually installed on your computer), and then click **OK** to close the windows.
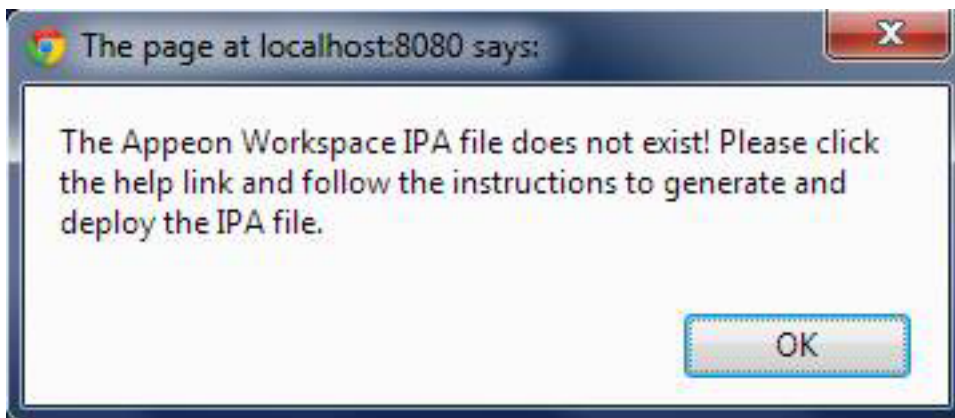
    Figure 2.3: "jar" is not recognized

2. A message box pops up saying "The Appeon Workspace IPA/APK file does not exist!..." when downloading the Appeon Workspace.

    Cause: This is because the generated appeonmobile.war file is not deployed to the application server.

    Solution: Deploy the generated appeonmobile.war file to the application server.

Figure 2.4: Download error

3. A message box pops up saying "Unable to Download Application -- "Mobile2020 AWS" could not be downloaded at this time." when installing the Appeon Workspace.

   Cause: This is because the IP address or the port number you entered is not correct during executing the gen.bat or gen.sh file.

   Solution: Execute the gen.bat or gen.sh file again and make sure to enter the correct IP address and port number.

Figure 2.5: Unable to download the application
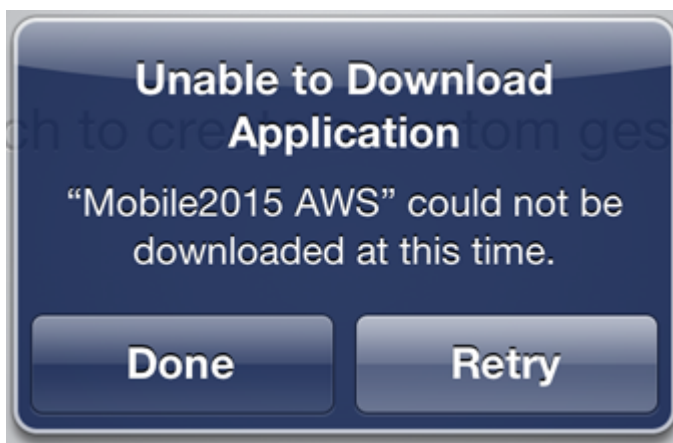
2.2 Installing and upgrading Appeon Workspace

2.2.1 Choosing a proper version of Appeon Workspace

Appeon Workspace could be available in several versions:

Table 2.1:

	iOS	Android
Demo version	Not supported	Supported and available
Built-in version	Not supported	Supported and available
Customized version	Supported but not available by default	Supported but not available by default

For iOS Mobile Devices:

- **Demo version** -- Appeon no longer publishes a **demo version** of Appeon Workspace on Apple App Store since PowerServer version 2020.

  Reasons are: 1) Workspace is for internal-use only and does not comply with app store policies; 2) the app store policies keep changing and it cannot be guaranteed that the future changes to the policies will not disrupt users' usage of Workspace. Therefore, publishing Appeon Workspace to Apple App Store is not supported any more.

  We recommend that you create a customized version of Appeon Workspace and distribute it on PowerServer or your own Web site. And before you do that, you can perform a quick test of Appeon Workspace on our web site ([Try Out Appeon Workspace](#)).

- **Built-in version** -- Appeon no longer provides built-in Appeon Workspace for the iOS devices since PowerServer version 2017.

- **Customized version** -- The **customized version** is created by the developer or server administrator using the PowerServer Toolkit Package tool. The customized Appeon Workspace can only be uploaded to a Web site such as PowerServer via AEM.

  - To distribute Appeon Workspace on PowerServer or your own Web site (so called "in-house distribution"), follow the instructions below:

    1. refer to Section 4.2, "Package & Distribute iOS Apps" in *PowerServer Mobile Tutorials* for packaging and distributing any iOS app including Appeon Workspace in manners including in-house distribution etc., then

    2. refer to Section 4.4.10, "Mobile App Distribution" in *PowerServer Configuration Guide for .NET* if you want to upload Appeon Workspace to PowerServer, and finally

    3. refer to [Configuring the Appeon Workspace download center](#) for creating the Appeon Workspace download center.

About In-House Distribution

Please be aware of the following important notes about using the In-House Distribution:

a. To distribute Appeon Workspace on PowerServer or your own Web site (in-house distribution), you need to enroll in the **iOS Developer Enterprise** program.

b. If you enroll in the **iOS Developer Enterprise** program, you are responsible for managing the Enterprise Program certificate and the provisioning profile. According to the Apple policy, the iOS Enterprise Program certificates expire after three years and provisioning profiles expire after one year, which means, before the distribution certificate expires, you will need to request an additional distribution certificate and replace the expired one, and before the provisioning profile expires, you will need to renew the provisioning profile using a valid certificate. Otherwise the app distributed using the enterprise provisioning profile will not launch after expiration. For more details, refer to [Managing Expiring](#)

Certificates and Provisioning Profiles in the Apple document App Distribution Guide.

c. If Appeon Workspace is built and distributed thru the **iOS Developer Enterprise** program, when it is run on iOS 9.0 or later for the first time, the end user may receive an "Untrusted Enterprise Developer" prompt, Apple forces this prompt to appear because this Appeon Workspace has not gone through the App Store review process so it is technically untrusted. The end user can bypass the prompt by going to **Settings** > **General** > **Profiles** (or **Device Management**), tapping on the developer name under the "Enterprise App" heading, and then clicking on **Trust**.

For Android Mobile Devices:

- **Demo version** -- Appeon publishes a **demo version** of Appeon Workspace on Google Play. This Appeon Workspace only works with the latest PowerServer on the market, and we strongly recommend it used only to test out or demonstrate the new features of the latest PowerServer. You can install this demo version from our web site (Try Out Appeon Workspace).

- **Built-in version** -- PowerServer contains a **built-in version** of Appeon Workspace for the Android device.

In every release build of PowerServer, the exact same build of Appeon Workspace is by default packaged and posted on PowerServer, so that the developer or end user can easily download and install it. You could also directly take the APK file provided by PowerServer and host it on your Web site, or send it to end users via emails etc.

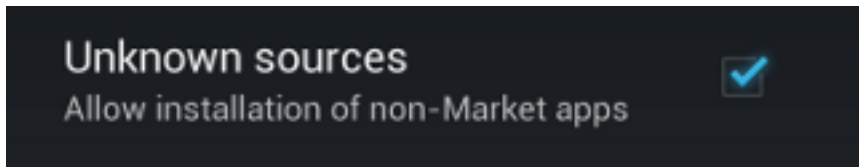To install the **built-in version** of Appeon Workspace on your Android device:

Use your Android mobile device to access the Appeon Workspace download center (http://*server_ip_address*/aws), and then click the download button to install Appeon Workspace to your mobile device.

Allowing the installation of apps from Unknown Sources on Android-powered devices

Android protects users from inadvertent download and install of apps from locations other than Google Play. It blocks such installs until the user opts-in **Unknown sources** in **Settings** > **Security**, shown in the following figure. To allow the installations of apps from other sources, users need to enable the **Unknown sources** setting on their devices, and they need to make this configuration change before they download the app to their devices.

Note that some network providers do not allow users to install app from unknown sources.

Figure 2.6: Enable Unknown Sources settings

Appeon Workspace download center is created by PowerServer to distribute the built-in version of Appeon Workspace. It is also served as a template to help the developer or server administrator to create their own download center and set the download URL correctly. Detailed instructions for how to do that are provided in Configuring the Appeon Workspace download center.

• **Customized version** -- The **customized version** is created by the developer or server administrator using the PowerServer Toolkit Package tool.

Normally you would not need to package a customized version for the Android device, because the built-in version should satisfy your needs (as aforementioned). The only scenario you may want to create a customized version for the Android device is that you want to customize the visual elements (banner, texts, language, icons etc.) and functionalities (add/remove apps, default app etc.) in the workspace.

If you are interested to package and distribute your own customized version of Appeon Workspace for the Android device, follow the instructions below.

To host Appeon Workspace on PowerServer or your own Web site, refer to Section 4.3, "Package & Distribute Android Apps" in *PowerServer Mobile Tutorials*.

2.2.2 Enabling auto-upgrade of Appeon Workspace

For Appeon Workspace built into the product and distributed in AEM, the upgrade is controlled by the Appeon Workspace itself. When PowerServer is upgraded, the Appeon Workspace installed on the mobile device will be automatically upgraded the next time when it connects with the PowerServer; unless you have turned off the **Check for Workspace Updates** option in Appeon Workspace. Refer to Checking for Appeon Workspace updates for how to enable it.

For Appeon Workspace that is created by the developer and distributed via AEM, the auto-upgrade feature will work when you do the following:

1. When you create the package of Appeon Workspace using the PowerServer Toolkit Package tool, the **Support Auto-Upgrade** and **Check for Updates** option in Appeon Workspace must be enabled.

   Refer to Section 9.3, "Customizing and packaging Appeon Workspace" in *PowerServer Toolkit User Guide* for how to enable the **Support Auto-Upgrade** and **Check for Updates** option.

2. When PowerServer is upgraded, you will need to create an updated package of Appeon Workspace using the PowerServer Toolkit Package tool. Be sure to use the same package settings as before especially the **Display Name** and **Bundle Identifier** (for iOS) or **App**

Name and **App Identifier** (for Android) when creating the package. These settings as well as the build number (which is automatically obtained from the product) will be used in the file name of the package, and you should not change this file name, because Appeon Workspace checks the file name to determine whether it is a different build of the currently installed package. And only when the build number is higher than that of the installed package, the auto-upgrade feature will work.

Refer to Section 9.3, "Customizing and packaging Appeon Workspace" in *PowerServer Toolkit User Guide* for how to set the **Display Name** and **Bundle Identifier** (for iOS) or **App Name** and **App Identifier** (for Android).

3. You will have to upload these packages via AEM, and AEM will record whatever information required for the auto-upgrade feature to work, for example, the package file name, the build number, the download URL etc., so that once Appeon Workspace connects with the PowerServer, Appeon Workspace can reliably check for the updated packages according to these information and then automatically get upgraded.

   For details about how to upload files and set the download URL in AEM, refer to Section 4.4.10, "Mobile App Distribution" in *PowerServer Configuration Guide for .NET*.

The auto-upgrade feature of the standalone mobile app works in the same way too.

3 Running apps in Appeon Workspace
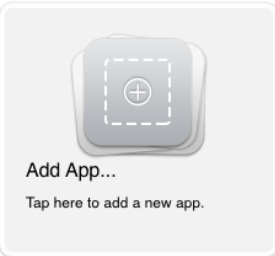
3.1 Adding applications

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

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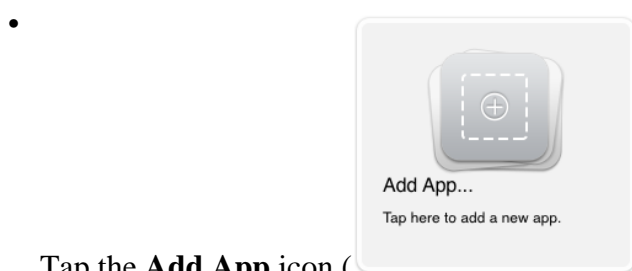
  Tap the **Add App** icon () (only available when there is no apps installed) in the data area; or

- 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 3.1: Add a new app
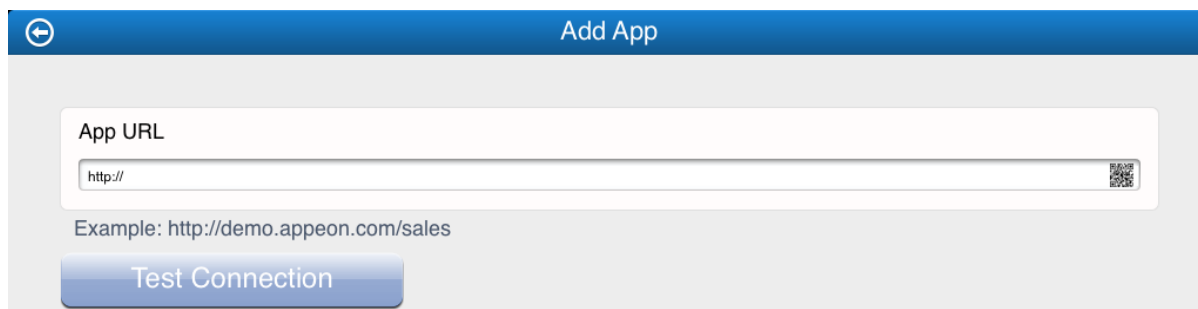
Step 2: In the **App URL** text box, you can either manually type the application URL (a typical application URL looks similar to http://www.abc.com/appname/), or tap the scanner icon () to scan the QR code and automatically get the application URL.

If you are a server administrator, you might be interested to know how to generate the QR code (see Section 4.4.10.3, "QR code generation for mobile application(s)" in *PowerServer Configuration Guide for .NET* or PowerServer Configuration Guide for J2EE).

Both HTTP and HTTPs are supported in Appeon Workspace running on mobile devices.

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 3.2: 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 3.3: Apps line up to be installed

3.2 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 3.4: Appeon Workspace task bar
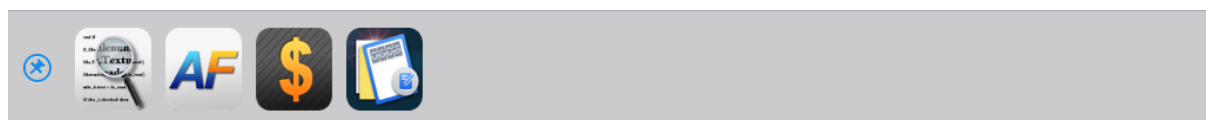
More than one application can be run at the same time, but only one can be displayed in the foreground and be available for accessing.

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.

3.2.1 Running apps in full screen

You can tap the full screen 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 3.5: Window with titlebar hidden
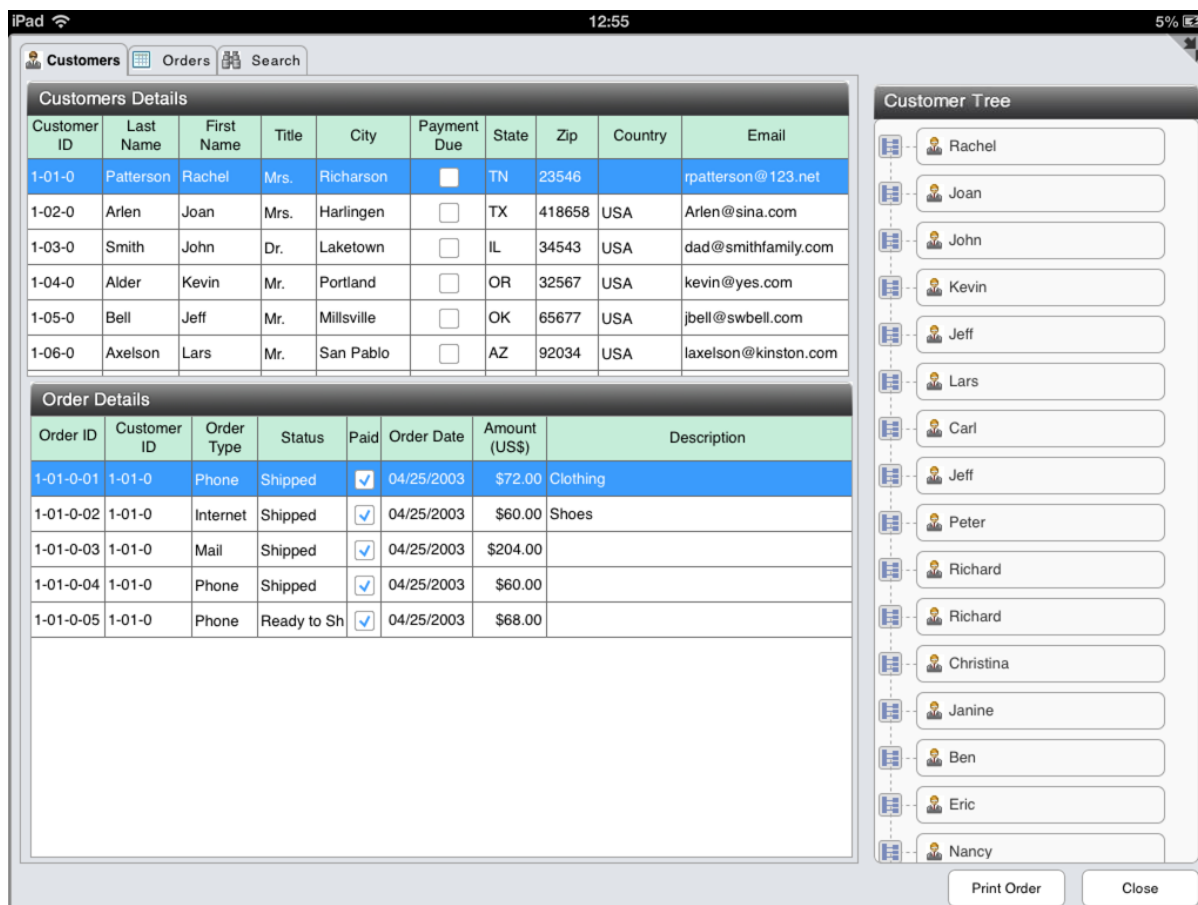
Tap the normal view icon ( ) on the top right corner of the window to return to the normal view (with the titlebar visible).

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, just like the full screen view.

3.2.2 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 3.6: Appeon Workspace task bar

3.3 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 & APIs 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 3.7: 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 3.8: Close option under settings
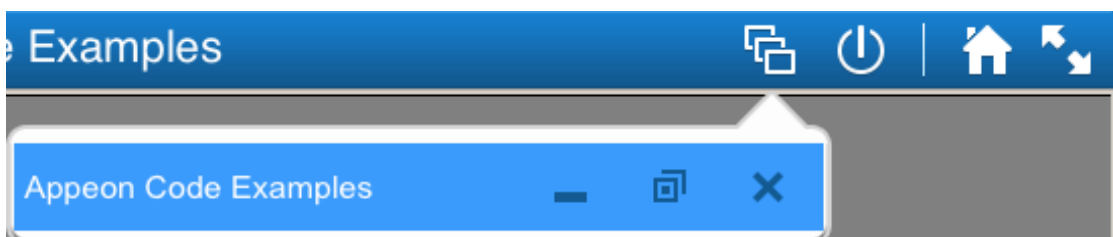
*   Method 4: Close all the running apps (both in the foreground and background) at once.

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

Figure 3.9: Close all apps
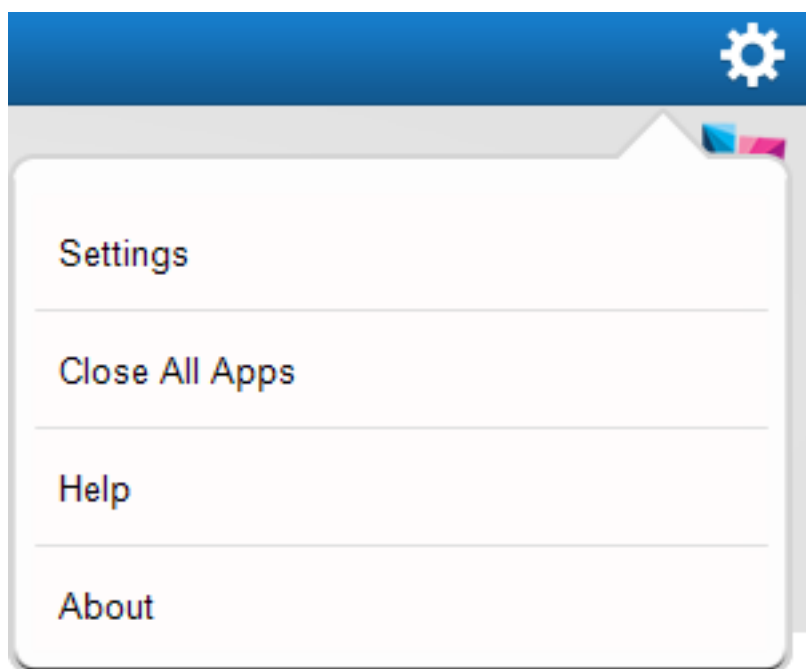
3.4 Editing applications

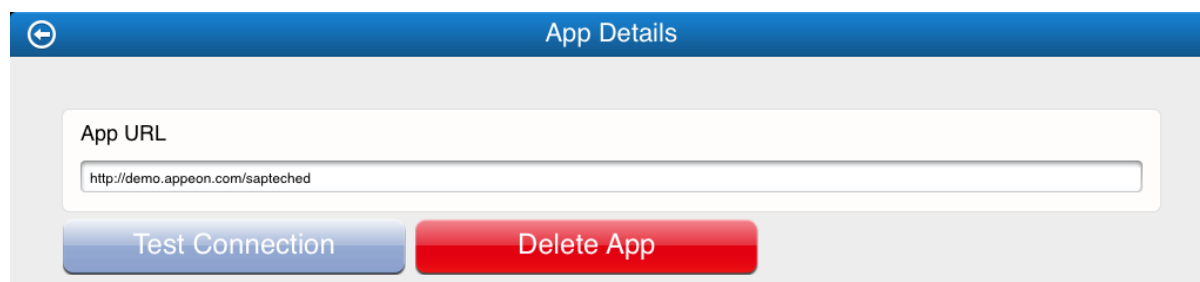Appeon Workspace provides capabilities to edit the application URLs.

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 3.10: Editing the app settings

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

Figure 3.11: 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.

3.5 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 3.12: 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 3.13: Deleting the app
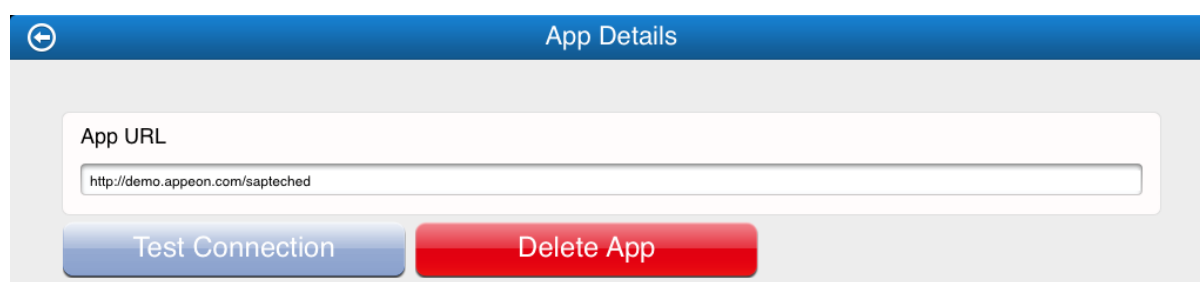
The application is then deleted from Appeon Workspace and the device.

Note: Applications in running cannot be deleted.

4 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 4.1: General
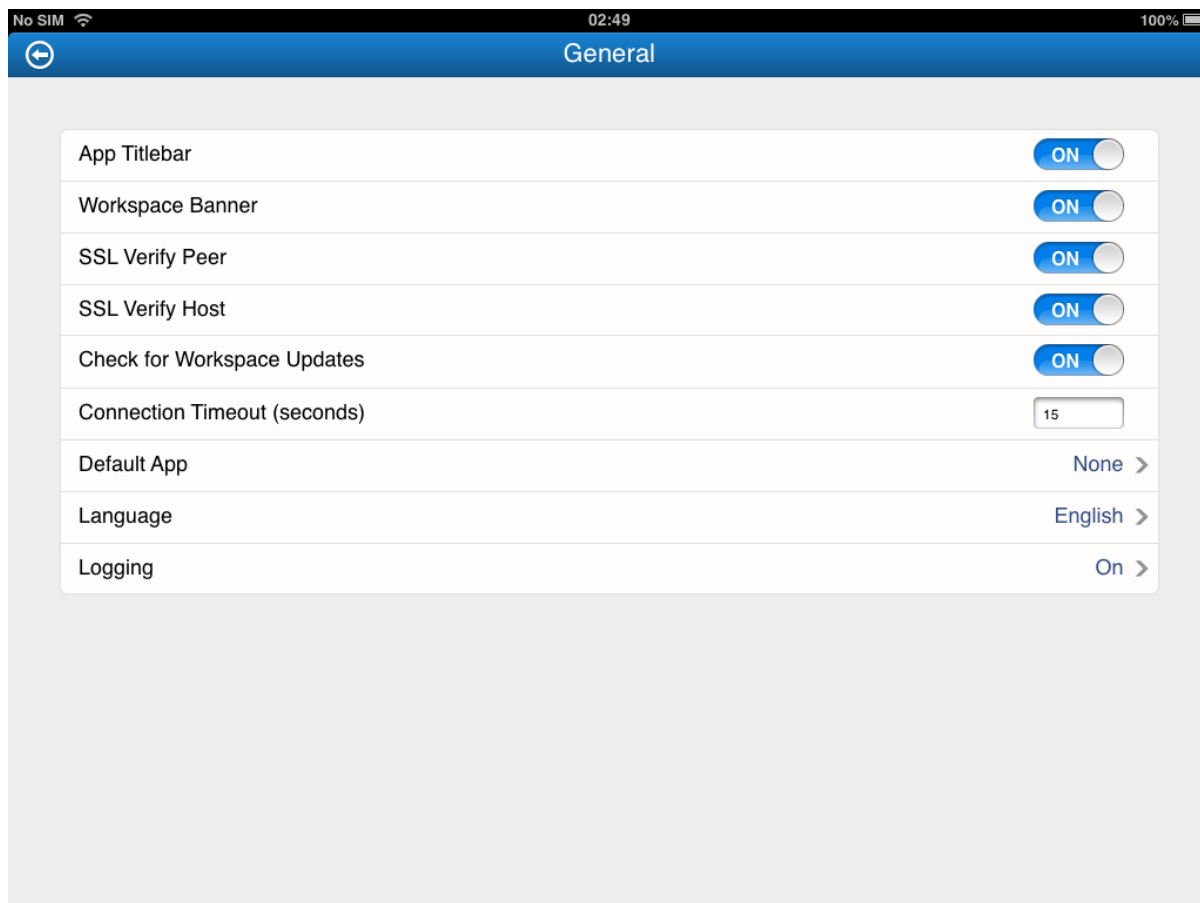
4.1 Showing or hiding app titlebar

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 4.2: Showing or hiding titlebar

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

4.2 Showing or hiding workspace banner

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

Figure 4.3: Displaying banner

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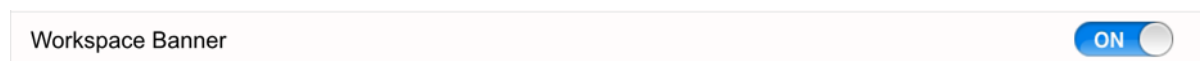
If it is **OFF**, the workspace banner will be hidden from the Appeon Workspace home screen, as shown in the following figure.

Figure 4.4: Advertisement bar is hidden
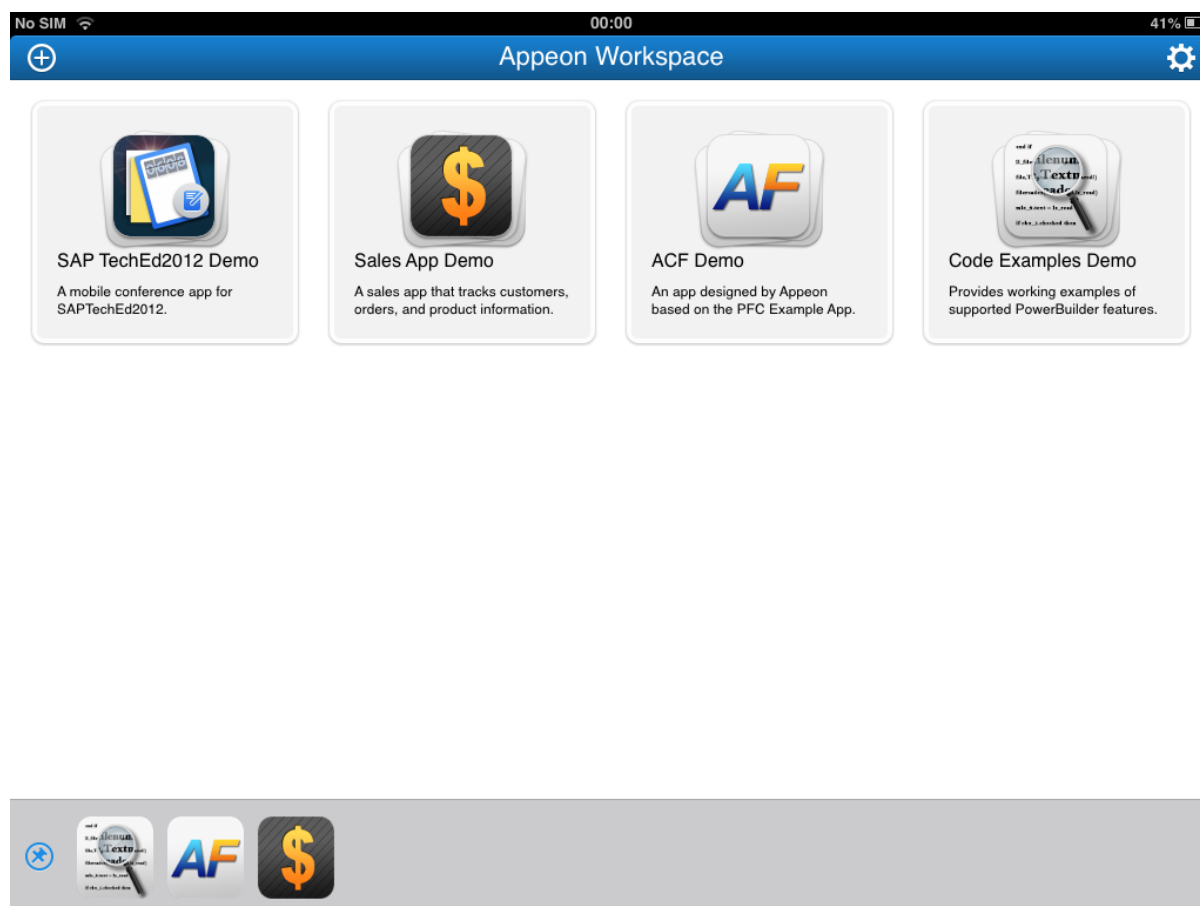
4.3 Validating server SSL certificate

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 4.5: SSL verify peer

SSL Verify Peer	ON

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.

4.3.1 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 4.6: SSL verify host

SSL Verify Host	ON

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

4.4 Checking for Appeon Workspace updates

Appeon Workspace can check for the updated version when it connects with the PowerServer, and when updated version is detected the end user will be prompted to install the updated version. To use this feature, set the **Check for Workspace Update** option to **On**.

Figure 4.7: Check for workspace updates

Check for Workspace Updates	ON
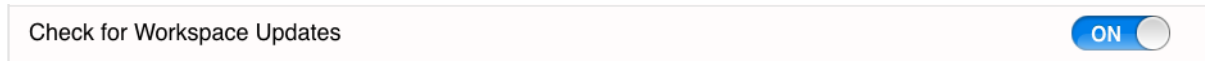
Note: this feature is for upgrading the Appeon Workspace only, not the application files. The application files will be automatically updated without notification when newer version is available on the PowerServer.

4.5 Showing keyboard on single tap or double taps

By default, the virtual keyboard on the mobile device pops up when the user taps twice or presses long time on the DataWindow field.

When the **Show Keyboard on a Single Tap** option is **On**, the keyboard pops up when the user taps once on the DataWindow field, and when it's **Off**, the keyboard pops up when the user taps twice on the DataWindow field.

This option is effective to all of the applications installed on this Appeon Workspace.

You can also use the APIs to control the keyboard display mode for a single application. Refer to the section called "of_setdwinputmode" in *Workarounds & APIs Guide* and the section called "of_getdwinputmode" in *Workarounds & APIs Guide*.

4.6 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 4.8: Connection Timeout

4.7 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 4.9: Setting up Default application
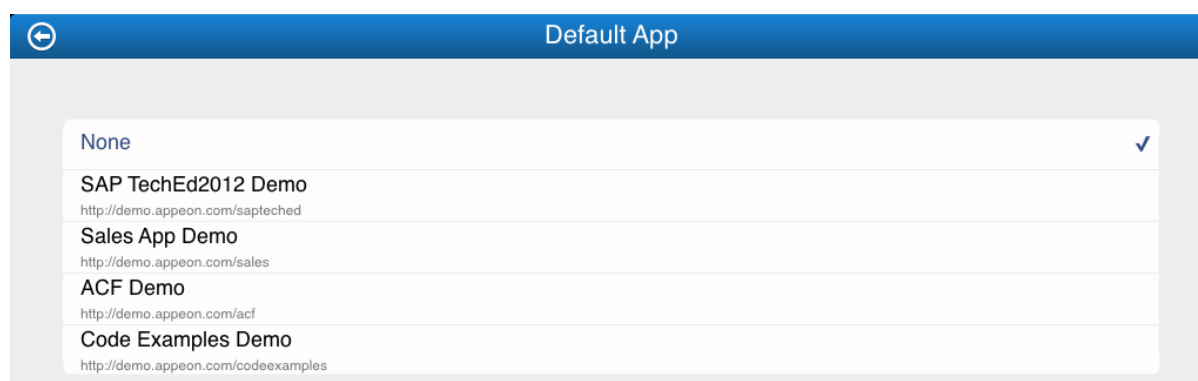
Step 2: Tap the application you want to set as the default app, or tap **None** if you do not want any application to run as the Appeon Workspace opens.

4.8 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 4.10: Language settings
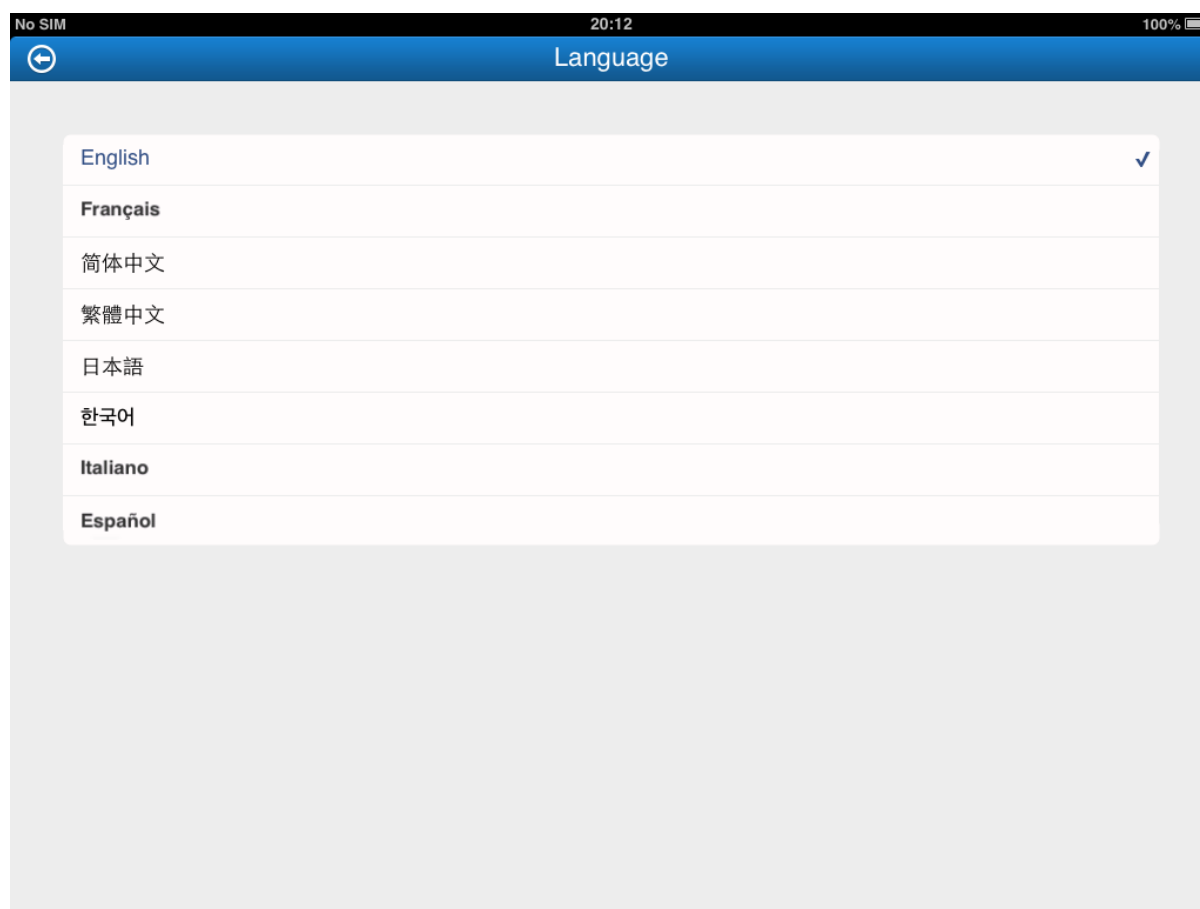
4.9 Configuring logs

Appeon Workspace provides several configuration options for managing logs.

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

Figure 4.11: Logging
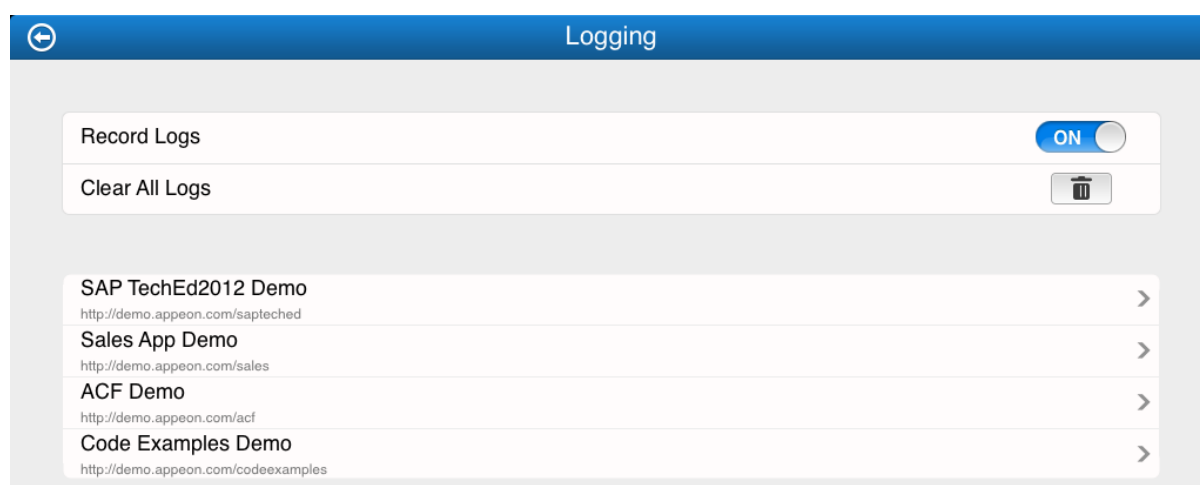
See the following table for details on each option.

Table 4.1: 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 4.4.6.8, "Client Logs" in *PowerServer Configuration Guide for .NET* or in PowerServer 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 4.12: Log settings for an app
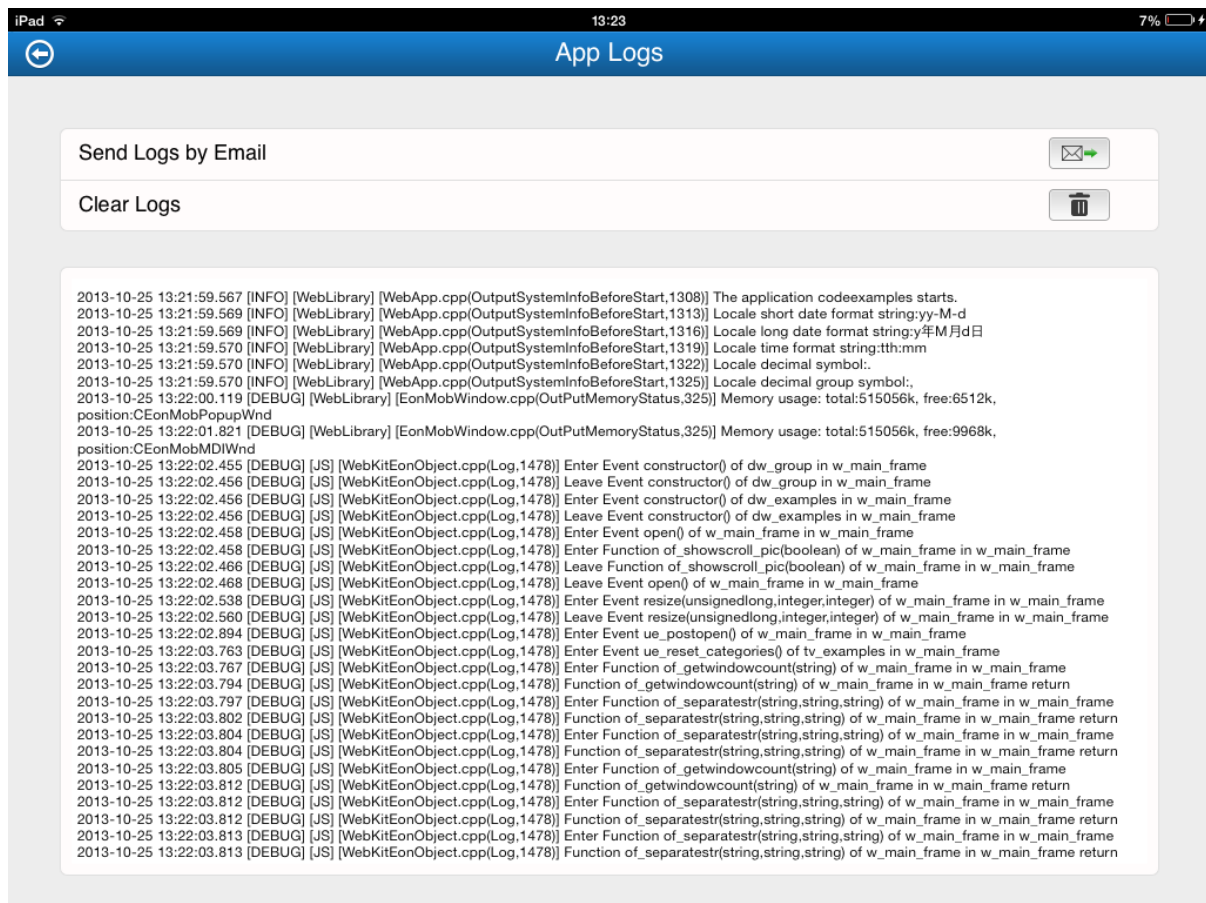
Step 2: Do one or both of the following:

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

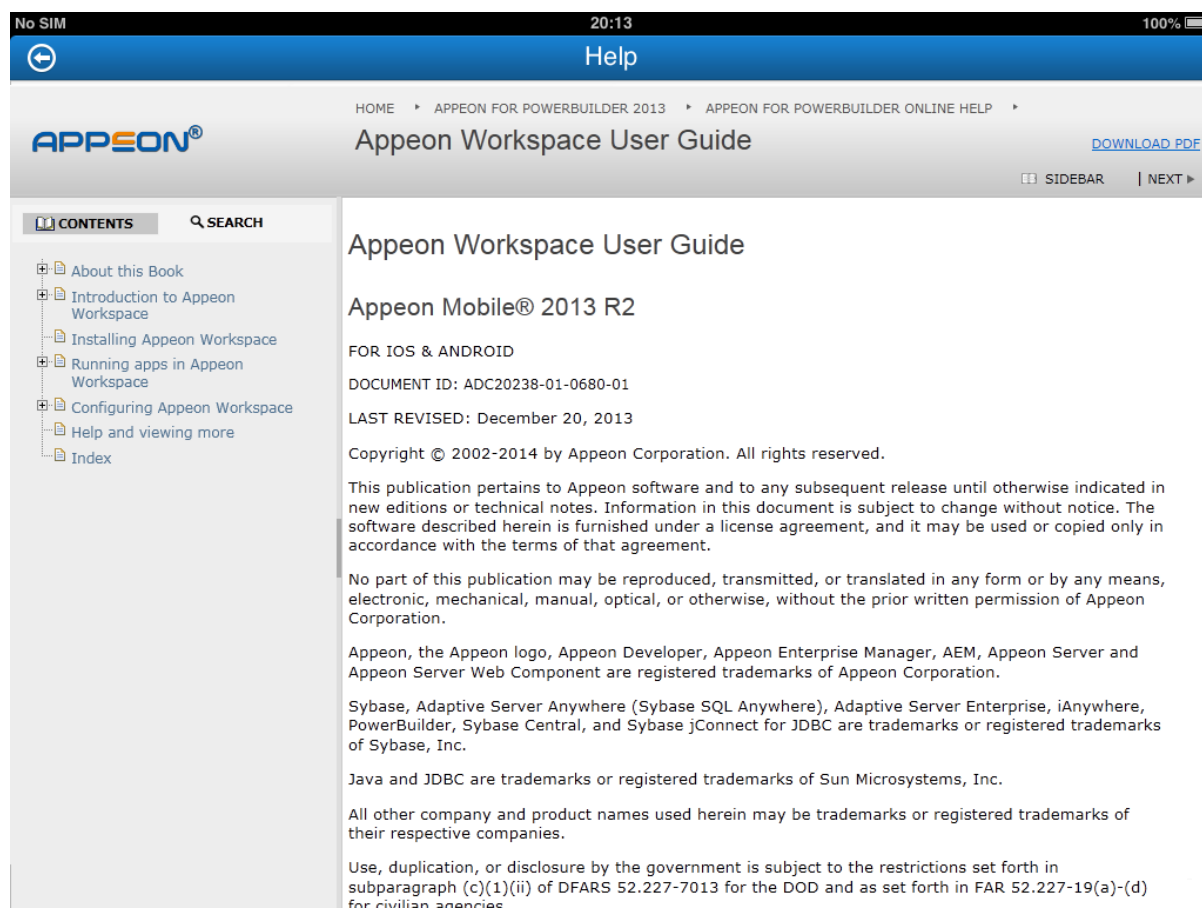- **Clear Logs**: tap the clear log icon ( ) to clear the logs for the application.
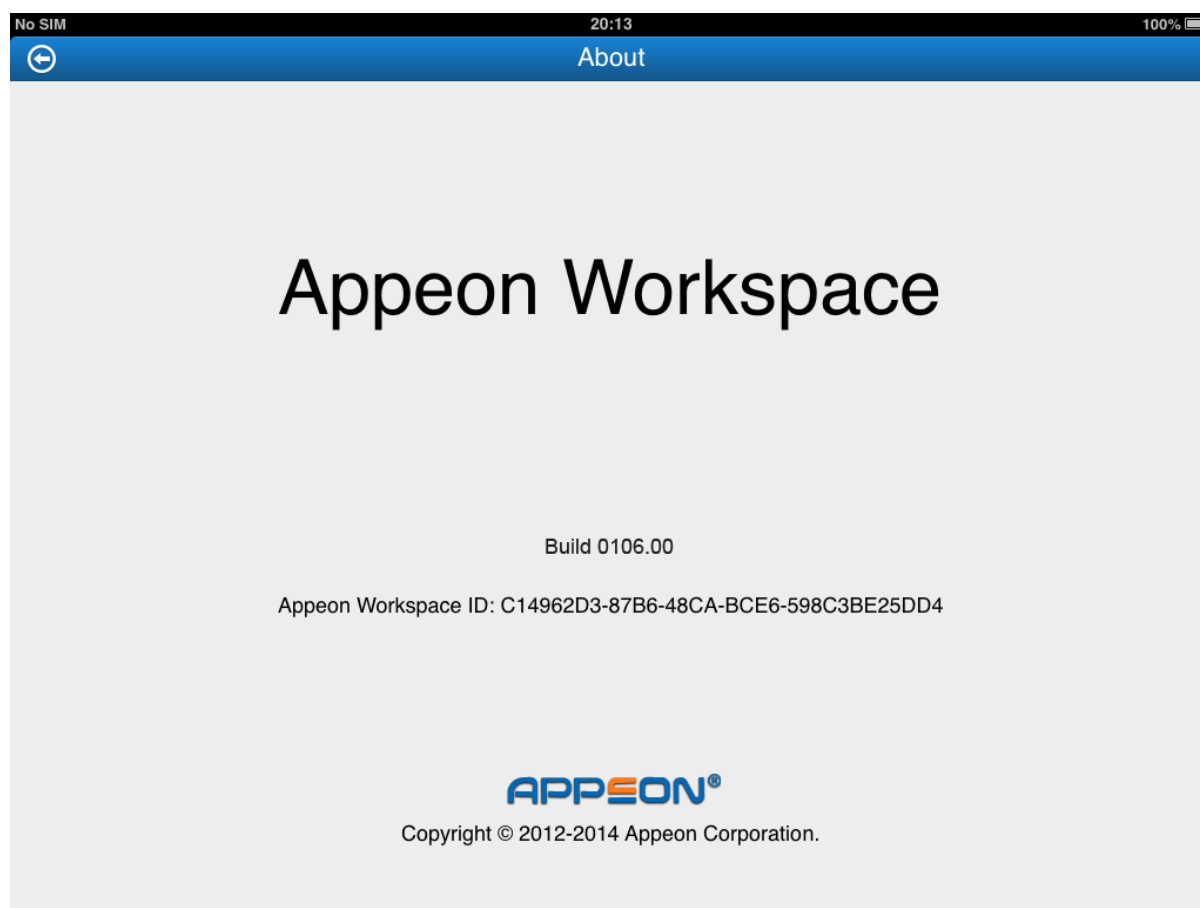
5 Help and About screen

There are a few other options under the settings icon ( ):

Help is to view the detailed user document of Appeon Workspace.

Figure 5.1: Help

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

Figure 5.2: 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 for this Appeon Workspace to have access rights to the application. To copy the Appeon Workspace ID from the About screen, you tap on the string of ID, and you will be prompted that the ID is copied to the clipboard automatically, you can then paste the ID to the instant message or email and send it to your system administrator.

For details on how to configure the Appeon Workspace ID in AEM, refer to Section 4.4.9.2, "Appeon Workspace" in *PowerServer Configuration Guide for .NET* or in PowerServer Configuration Guide for J2EE.

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