Mobile Task Integration User's Guide

Version 10.3

October 2018

Table of Contents

About this Guide

This guide describes how to use Mobile Task Integration to create a mobile version of a task application.

To use this guide effectively, you should be familiar with Designer Task Development and webMethods Mobile Administrator.

Document Conventions

Convention	Description
Bold	Identifies elements on a screen.
Narrowfont	Identifies service names and locations in the format *folder.subfolder.service* , APIs, Java classes, methods, properties.
Italic	Identifies:
	Variables for which you must supply values specific to your own situation or environment.
	New terms the first time they occur in the text.
	References to other documentation sources.
Monospace font	Identifies:
	Text you must type in.
	Messages displayed by the system.
	Program code.
{ }	Indicates a set of choices from which you must choose one. Type only the information inside the curly braces. Do not type the { } symbols.
|	Separates two mutually exclusive choices in a syntax line. Type one of these choices. Do not type the | symbol.
[ ]	Indicates one or more options. Type only the information inside the square brackets. Do not type the [ ] symbols.

Convention	Description
...	Indicates that you can type multiple options of the same type. Type only the information. Do not type the ellipsis (...).

Online Information and Support

Software AG Documentation Website

You can find documentation on the Software AG Documentation website at "http://documentation.softwareag.com". The site requires credentials for Software AG's Product Support site Empower. If you do not have Empower credentials, you must use the TECHcommunity website.

Software AG Empower Product Support Website

If you do not yet have an account for Empower, send an email to "empower@softwareag.com" with your name, company, and company email address and request an account.

Once you have an account, you can open Support Incidents online via the eService section of Empower at "https://empower.softwareag.com/".

You can find product information on the Software AG Empower Product Support website at "https://empower.softwareag.com".

To submit feature/enhancement requests, get information about product availability, and download products, go to "Products".

To get information about fixes and to read early warnings, technical papers, and knowledge base articles, go to the "Knowledge Center".

If you have any questions, you can find a local or toll-free number for your country in our Global Support Contact Directory at "https://empower.softwareag.com/public_directory.asp" and give us a call.

Software AG TECHcommunity

You can find documentation and other technical information on the Software AG TECHcommunity website at "http://techcommunity.softwareag.com". You can:

- Access product documentation, if you have TECHcommunity credentials. If you do not, you will need to register and specify "Documentation" as an area of interest.

- Access articles, code samples, demos, and tutorials.

- Use the online discussion forums, moderated by Software AG professionals, to ask questions, discuss best practices, and learn how other customers are using Software AG technology.

- Link to external websites that discuss open standards and web technology.

Data Protection

Software AG products provide functionality with respect to processing of personal data according to the EU General Data Protection Regulation (GDPR). Where applicable, appropriate steps are documented in the respective administration documentation.

1   About Mobile Task Integration

What Is Mobile Task Integration?

Using Mobile Task Integration you can create a mobile version of an existing BPM task application. Mobile Task Integration automatically generates a login screen, a task inbox, and task detail views for your application. It can also upload your mobile application to Mobile Administrator where it can be made available to users through your chosen app store.

You create a mobile task application in the Software AG Designer UI Development perspective. You select an existing BPM task and start a wizard that prompts you for information required to create a mobile version of your application in a new mobile application project. After the mobile application project is created, you can run a test simulation of the application or upload it to Mobile Administrator, where you can make it available to users through your selected app store.

When you download the mobile task application from an app store and start it, you will be prompted to specify an Integration Server and log in. After you log in, your assigned tasks appear in a mobile task inbox page, as shown below:
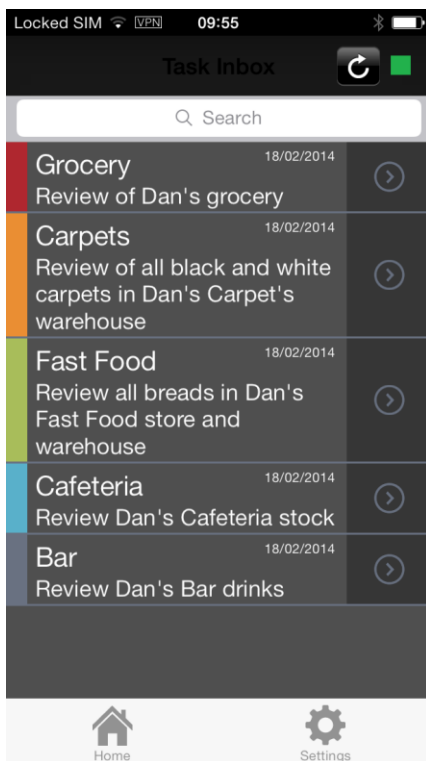
Differences Between Mobile and Non-mobile Task Versions

The mobile task application is essentially a mobile user interface to the related task instances in the runtime environment. As such, only a subset of the available task information and functionality is made available through the mobile task application:

■ The mobile task application displays only the business data fields from the original task, as well as the task ID, name, description, date, status, and priority.

■ The mobile task inbox indicates task priority only by color:

Red = critical

Orange = high

Green = medium

Blue = low

Purple = none

■ The task ID and task status appear only in the task details page. Task priority appears in color in the task inbox, and in both color and text in the task details page.

Related Documentation

■ *webMethods BPM Task Development Help*

Describes how to use the task development features of the UI Development perspective to create tasks that address a particular human activity. These tasks can be stand-alone or part of a business process.

■ *webMethods Task Engine User's Guide*

Describes concepts and procedures for users who are working with tasks in the My webMethods environment.

■ *Working with My webMethods*

Provides procedures for navigating and using the basic features of My webMethods, a web-based administration and monitoring user interface.

■ *Using webMethods Mobile Designer*

Describes using Mobile Designer to create mobile applications for multiple device platforms.

■ *webMethods Mobile Development Help*

Describes how to use webMethods Mobile Designer to create mobile applications.

■ *webMethods Mobile Development Java API Reference*

Describes how to access Mobile Administrator through the REST API.

2   Working with Mobile Task Integration Projects

Prerequisites

Important: Mobile Task Integration functionality requires version 9.6 or later of these products: Software AG Designer, Integration Server, and My webMethods Server/Task Engine.

Use this procedure to create a mobile task application and upload it to Mobile Administrator where it can be made available to users through your chosen app store.

Prerequisites

Before you perform this procedure, you must:

■ Install webMethods Mobile Designer with Software AG Installer, as described in the PDF publication *Installing Software AG Products*. Be sure to verify that you have defined the MOBILE_DESIGNER system variable.

■ Install **Designer > Mobile Applications > Task Integration** with Software AG Installer.

■ Verify that the WmTaskClient package (Task Client Support) is installed on your Integration Server, and configured to connect to the My webMethods Server/Task Engine environment where your tasks are running. For configuration information, see the *webMethods Task Engine User's Guide*.

■ Create an existing task application project with Software AG DesignerTask Development and publish it to My webMethods Server. Verify that all running task instances for this task application are assigned to the user account you plan to use for viewing tasks.

■ Obtain a URL and an access token for the Mobile Administrator server to which you want to upload your application.

■ Obtain the application identifier, bundle ID, and project to use for your application in Mobile Administrator. These must already be defined in Mobile Administrator before you can upload your application there. Contact your Mobile Administrator administrator if you need help obtaining this information.

■ Verify that you have appropriate user account permission to work with mobile task application projects in Mobile Administrator. If your user account does not have this permission, contact your Mobile Administrator administrator.

Creating a New Mobile Task Application Project

To create a mobile task application project

1. In the UI Development perspective Solutions view, locate a task project that has been previously successfully published to My webMethods Server and that contains the task applications you want to work with.

2. Right click the project and click **Create new Mobile Task Integration Project**.

3. If there is more than one task in the project, select the specific tasks you want to work with and click **Next**.

4. On the **Mobile Project** wizard page, specify:

Field	Description
Project Name	Name for the mobile application project.
Application Name	Name for the mobile application.
Package Name	Name for the base package for the generated mobile application project. **Important:** The package name must be all lowercase letters and must take the form of a fully qualified Java package name, for example com.ajax.inventory.

5. Accept the default location for the project files or specify a different location.

6. Do one of the following:

   ■ If you plan to manually upload the mobile application project to Mobile Administrator, click **Finish** and skip steps 7 - 11. After the project is created, the Java perspective opens automatically. Proceed to "Manually Uploading a Mobile Task Application to Mobile Administrator " on page 18.

   ■ To enable Designer to automatically upload the mobile project to Mobile Administrator, click **Next** and continue to the next step.

7. On the Mobile Administrator page, select the **Use Mobile Administrator** check box and specify:

Field	Description
URL	URL for the Mobile Administrator server to which this application project will be uploaded.
Access token	Token required to access Mobile Administrator.

8. Click **Login** to connect to Mobile Administrator.

9. In the **Application** field:

   ■ For a new mobile task application, click **New** and specify:

Field	Description
Identifier	String that uniquely identifies the application in the app store. Check with your Mobile Administrator administrator for information about obtaining an identifier.
Android iOS	The type of mobile platform on which the application will run. Select **Android**, **iOS**, or both.
Bundle ID	Fully qualified name for the mobile project. The ID takes the form of a fully qualified Java package name, for example com.domainname.applicationame. Check with your Mobile Administrator administrator for information about obtaining a bundle ID.

- For an existing mobile application, click **Existing** and select a previously used identifier.

10. Click **Finish**. Designer creates the mobile application project and then switches to the Java perspective.

11. To have Designer automatically upload your application to Mobile Administrator, follow the instructions in "Automatically Uploading a Mobile Task Application to Mobile Administrator " on page 18 .

Adding a Task to an Existing Mobile Task Application Project

You can add a task to an existing mobile task integration project using either of two methods:

- By selecting a task in the Solutions view and adding it to a mobile task application project.

- By selecting a mobile task application project in any view that displays the project (for example, the Package Explorer view) and then selecting one or more tasks to add to the project.

Adding a Task from the Solutions View

To add a task from the Solutions view

1. In the UI Development perspective Solutions view, locate a previously published task project that contains the task application you want to add to an existing mobile task application project.

2. Right click on the task and click **Add to Mobile Task Integration Project**.

3. In the Add to Mobile Task Project wizard, select the mobile task project you want to add the task to, and click **Finish**.

Adding a Task from a Project in a View

To add a task from a project in a view

1. In any view that displays the mobile application project (for example, the Package Explorer view), locate the mobile task application project that contains the task applications you want to add.

2. Right click on the project and click **Add Task(s)**.

3. In the Add to Mobile Task Project wizard, select the task applications you want to add to the project, and click **Finish**.

Running a Test Simulation of Your Mobile Task Application

To test your application, you can run a simulation of it using Phoney. Prior to beginning this procedure, you must know the server host name and port number, and you must have an active user account on the server.

To run a test simulation of your mobile task application project

1. In the Java perspective, in the Package Explorer view, locate the mobile application project that contains the mobile task application you want to test.

2. Do either of the following:

   ■ From the Package Explorer view, drag and drop the build.xml file onto the Ant view to import it. Run the resulting target by double clicking it.

   ■ In the Package Explorer view, double click the build.xml file to open it in the Outline view.

3. In the Ant or Outline view (which ever you have chosen to use), scroll down to **+ +Run-Phoney-With-Compile**, then right click on that entry and click **Run As > 1 Ant Build**.

4. In the Phoney simulator, place your cursor in the **Enter server host** field to open the keyboard. Type your server host name, and then click in the **Enter server port** field and type the port number. If you connect to the server with HTTPS, click **Secure Connection**.

5. Click **Next**.

6. Type your credentials, click **Remember Password** if desired, and then click **Log In** to access the mobile task inbox.

7. In the mobile task inbox, open the task you want to view.

8. Click **File > Quit** in the Phoney menu bar to exit the simulation.

Manually Uploading a Mobile Task Application to Mobile Administrator

Use this procedure to manually upload your application project to Mobile Administrator where you can make it available to users through your selected app store.

For information about automatically uploading your mobile project to Mobile Administrator, see "Automatically Uploading a Mobile Task Application to Mobile Administrator " on page 18. For further information, see the documentation for webMethods Mobile Administrator.

To manually upload a task application to Mobile Administrator

1. On your local system, locate the project directory that contains the files for the mobile task application project you want to upload to Mobile Administrator. This is the directory you specified on the Mobile Project screen when you created the project.

2. Place all files and folders from this directory, except for the _temp_ and bin folders, into a zip file.

3. Go to Mobile Administrator.

4. Select the mobile project.

5. Click **Build > Build Configurations**.

6. Click **Choose File**.

7. Browse to the directory that contains the zip file you created and select that file.

8. Select a platform, either **iOS** or **Android**.

9. Click **Launch Selected Build Configurations**.

10. Click **Build Jobs** to verify that there is a build listed there for your project. When the build has been successfully processed, it will have the status **Success**.

Automatically Uploading a Mobile Task Application to Mobile Administrator

Use this procedure to have Designer automatically upload your application to Mobile Administrator where it can be made available to users through an app store.

To use the procedure, you must have previously entered Mobile Administrator information on the Mobile Administrator wizard page when you created your new Mobile Task Integration project.

If you did not enter this information, you must manually upload the application to Mobile Administrator. See "Manually Uploading a Mobile Task Application to Mobile Administrator " on page 18.

To automatically upload a task application to Mobile Administrator

1. In the Java perspective, in the Package Explorer view, locate the mobile application project you want to upload to Mobile Administrator.

2. Scroll down to build.xml, and double click it and go to the Ant or Outline view.

   If you are not running behind a network proxy configuration, select **Remote Multi-Build**, select a platform in the target name field, then click **Remote Multi-Build**.

   If you are running behind a network proxy configuration:

   a. Select **Remote-Multi-Build > Run As > External Tool Configurations**.

   b. In the opened window, click the **JRE** tab.

   c. In **VM arguments**, specify the required arguments, separated by spaces. The following table lists the available VM arguments:

Argument	Description
–Dhttp.proxyHost	HTTP proxy host address
–Dhttp.proxyPort	HTTP proxy port
–Dhttps.proxyHost	HTTPS proxy host address (if present)
–Dhttps.proxyPort	HTTPS proxy port (if present)

   For example:
   ```
   -Dhttp.proxyHost=proxy.mfq-inc.com -Dhttp.proxyPort=3008
   ```

   d. Click **Run**.

3. Go to Mobile Administrator and click **Build > Build Jobs** to verify that there is a build listed there for your project. When the build has been successfully processed, it will have the status **Success**.

3   Working with Mobile Tasks

Overview

You can use webMethods Mobile Task Integration to access tasks that are running in the webMethods Task Engine, which runs in the My webMethods Server run-time environment. Instead of logging in to My webMethods and interacting with your assigned tasks through the My Inbox and custom task inbox pages in My webMethods, you can log in and open these tasks through a webMethods mobile task application installed on your iOS or Android mobile device.

Mobile task applications accessed through your mobile device have limited functionality, and do not offer all of the features of tasks available in the My webMethods environment. For more information, see "What Is Mobile Task Integration?" on page 10.

For more information about tasks in general, and their capabilities in the My webMethods environment in particular, see the *webMethods Task Engine User's Guide*.

Obtaining the Mobile Task Application

To be able to interact with tasks from your mobile device, your development team must first create a mobile version of the task application, as described in "Creating a New Mobile Task Application Project" on page 14. After creating this mobile task application, your development team uploads it to their preferred app store, where it can be downloaded onto your mobile device.

Contact your task development team to determine which mobile task applications are available and the app store that you can download them from. If a mobile task application has not been created for the task or tasks you interact with, you will not be able to access them from your mobile device.

Prerequisites

Before you can work with tasks on your mobile device, the following requirements apply:

■ Your mobile device must have wireless or cellular access to the Internet.

■ You must be able to connect to the target Integration Server from your mobile device.

■ You must have the WmTaskClient package (Task Client Support) installed on your Integration Server, and it must be configured to connect to the My webMethods Server/Task Engine environment where your tasks are running. For configuration information, see *webMethods Task Engine User's Guide*.

■ You must have an active user account on both Integration Server and My webMethods Server.

■   Your user account must be granted the My webMethods Server privileges to access and interact with the task applications you want to work with.

■   These tasks must be assigned to your user account.

Specifying a Server and Initial Log In

When you start your mobile task application for the first time, you must specify an Integration Server and port number and log in to that server.

Important:	Mobile Task Integration functionality requires Integration Server version 9.6 and later, and My webMethods Server/Task Engine version 9.6 and later.

**To specify an Integration Server and port number**

1. Start the mobile task application.

2. The first time you start the mobile task application, you are prompted to provide server information:
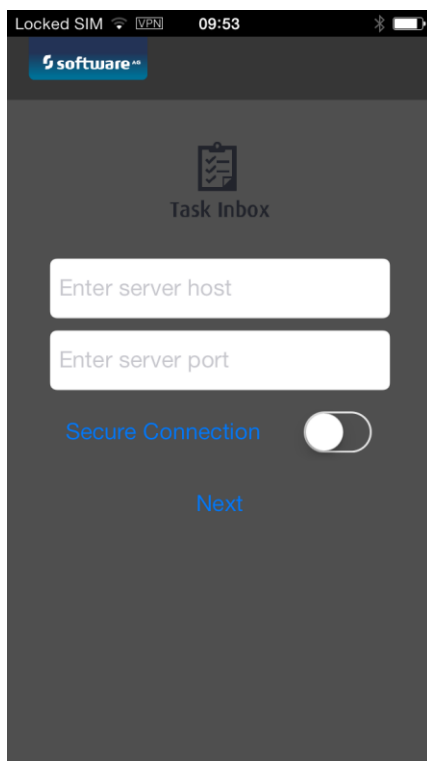
3. Specify the following information:

     ■   **Server host**. Tap the field and type the host name or IP address of the server instance, for example: `192.168.0.1` or `server.mycompany.com`.

     ■   **Server port**. Type the port number (5555 is the default for Integration Server).

4. If you want to connect with HTTPS protocol, tap **Secure Connection**.

5. Tap **Next**.

   The server information is saved on your mobile device as the `default` server. You can connect to this server again without having to reenter this information. Tap the server name to add another Integration Server to connect to if necessary. For more information, see .
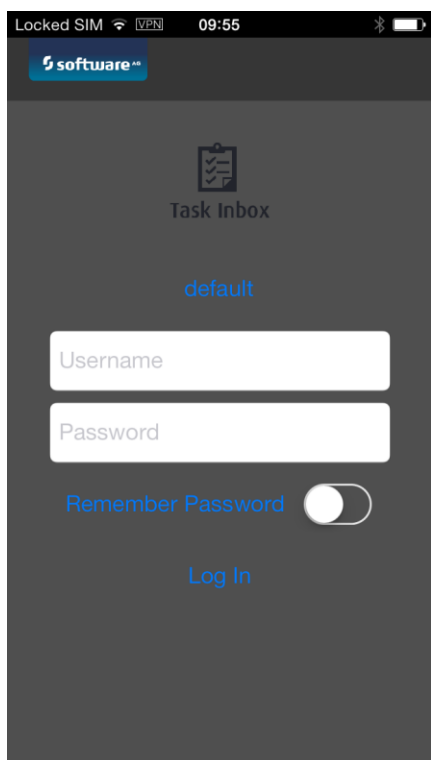
6. Tap the **User Name** field and **Password** fields to open the keyboard and enter your credentials for your Integration Server user account.

7. If you want to retain the password on your mobile device, tap **Remember Password**.
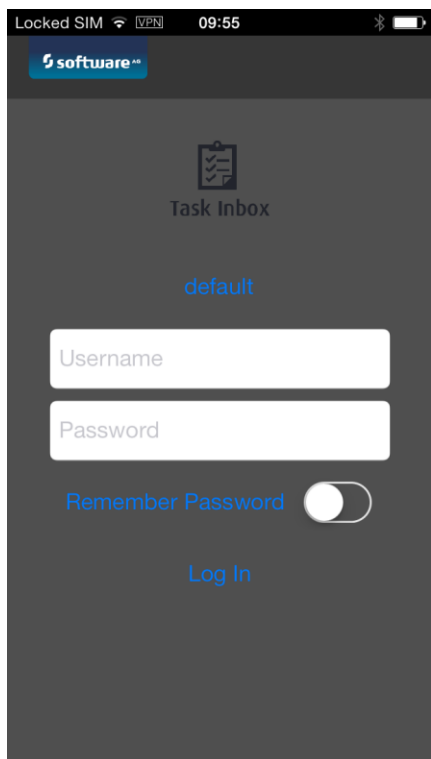
8. Tap **Log In**.

Logging In to a Server

After you have specified an Integration Server, you can log in to that server, or any other server you have defined, to obtain access to your task inbox.

To log in to Integration Server

1. Start the mobile task application on your mobile device.

2. On the login page, the name of the currently configured Integration Server appears above the credential fields.

To change the target Integration Server, tap the server name and then tap the server you want to connect to.

3. Tap the **Username** and **Password** fields to open the keyboard and enter your credentials:

4. If you want to retain the password on your mobile device, tap **Remember Password**.

5. Tap **Log In** to open your mobile task application inbox.

Working with the Mobile Task Inbox

After you log in, your mobile task inbox appears, populated with all of the tasks assigned to you:
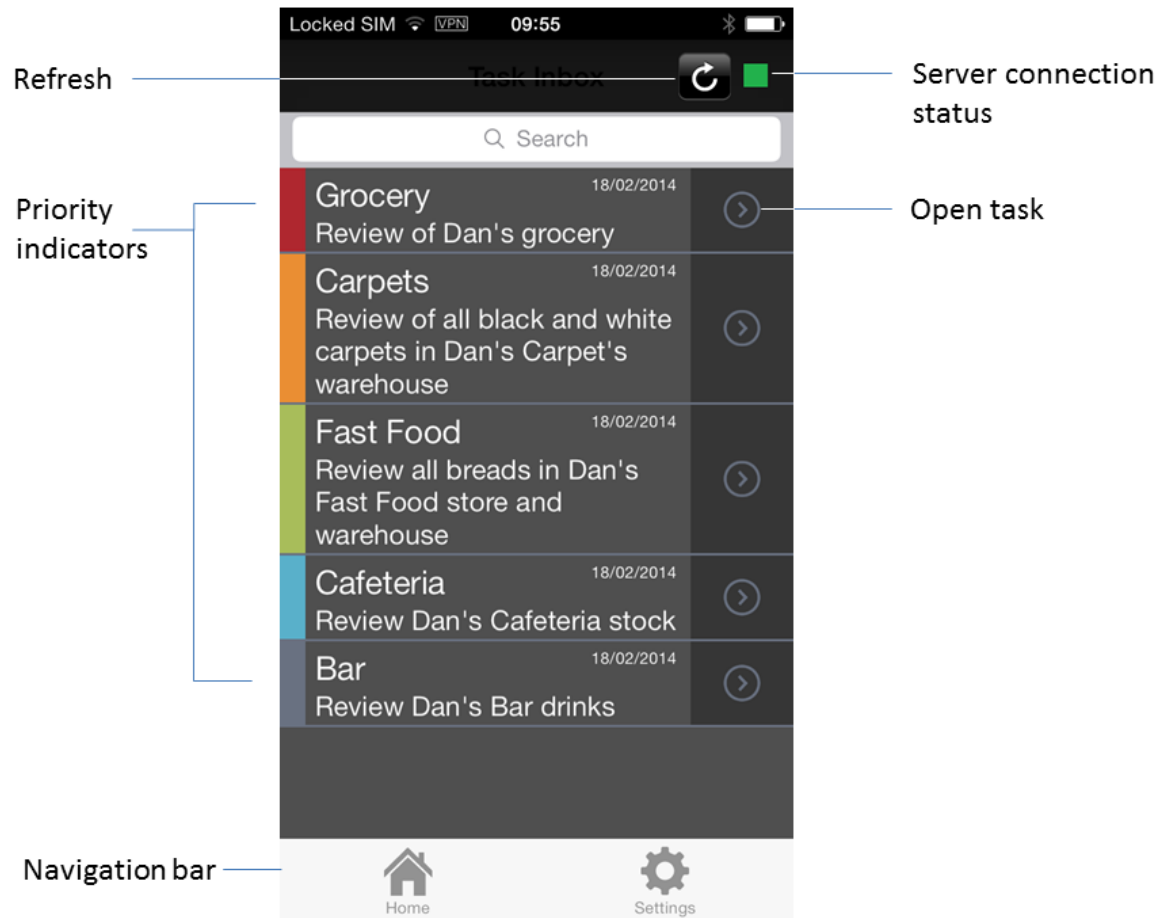
- **Priority indicator**. Displays the task priority by color:

  Red = critical

  Orange = high

  Green = medium

  Blue = low

  Purple = none

- Open task. Tap to view the available task details.

- Refresh. Tap to update the task inbox display.

- Server connection status. Green = connected, red = disconnected.

- **Home**. Available only when you are logged in. Tap to return to the mobile task inbox.

- **Settings**. Available only when you are logged in. Tap to access the Log Out and Manage Server capabilities.

Mobile task applications are subject to the same behavior as tasks in My webMethods. For example:

■ Tasks must be assigned or delegated to you to appear in your mobile task inbox.

■ A completed task no longer appears in the inbox.

Searching the Mobile Task Inbox

The search function enables you to search all tasks in your mobile task inbox. The search term you enter is compared to the task name and the task description of all inbox tasks.

To search the mobile task inbox

1. Tap the task search text field at the top of the page to open the keyboard:
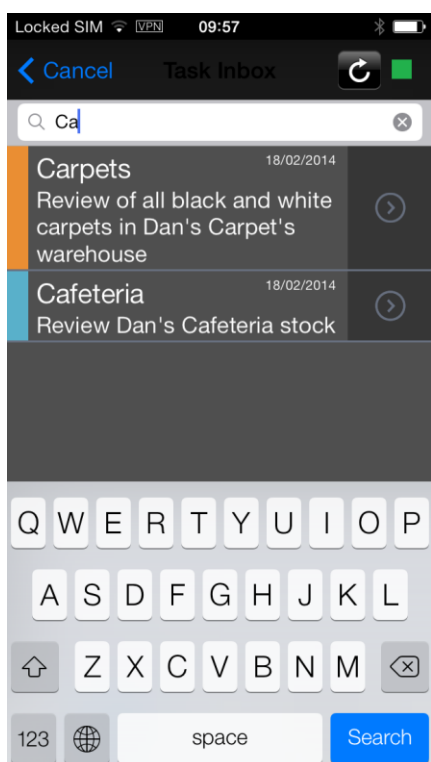
2. Type the search term into the search field and tap **Search**. Tasks that match the search term appear in the task search results list. Tap the open task button to view the task details.
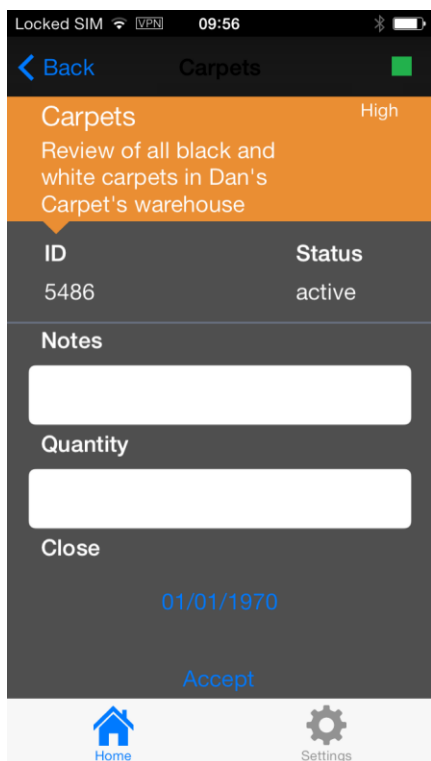
3. Tap **Cancel** to hide the keyboard.

The ⊕ in the lower left provides access to language settings.

Viewing Mobile Task Details

You can view the available task detail information for any task in your mobile task inbox.

To view mobile task details

1. In the mobile task inbox or the search results display, tap the open task button. The task details page appears:

The task name and description appear at the top of the page, with a background color indicating the task priority. The task priority is also displayed in text.

- The task ID and task status are displayed. Task status is a read-only value.

- To work with a text entry field, tap a field to open the keyboard for text entry.

- Task actions, such as **Accept**, appear at the bottom of the page. Tap to activate.

- Task data and associated labels are displayed. For example, in the figure above, the task has a **Close** date of 01/01/1970.
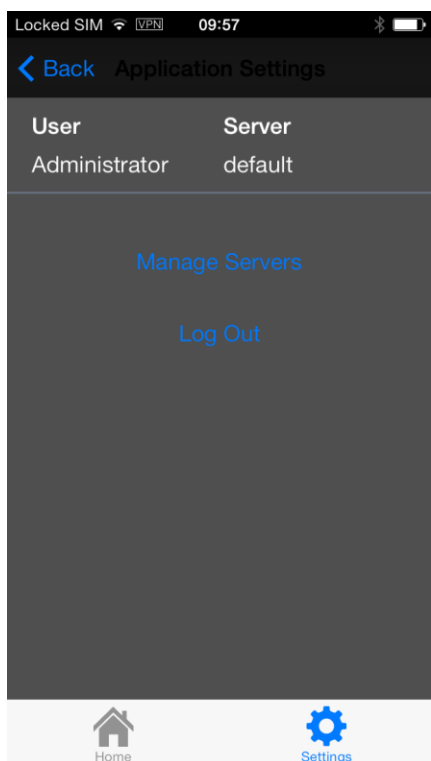
2. Tap **Back** to return to the mobile task inbox.

Logging Out of the Current Server Session

When you are done working, you can log out to end the server session.

To log out of the currently connected server

1. In the navigation bar, tap **Settings**.

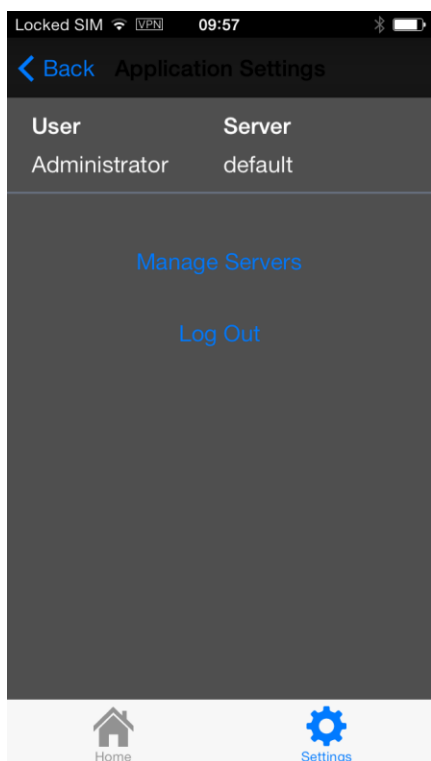The user name and server name for the currently connected session appear at the top of the Settings page.

2. Tap **Log Out** to end the current server session.

Managing Servers

After you enter your Integration Server information, you can modify the server information, or add or delete server definitions.

To manage Integration Servers

1. In the navigation bar, tap **Settings**.

The user name and server name for the currently connected session appear at the top of the Settings page.

When you are logged in, you can modify, add, or delete other server definitions. However, you cannot modify or delete the currently connected server definition.

2. Tap **Manage Servers** to modify, add, or remove a server definition.
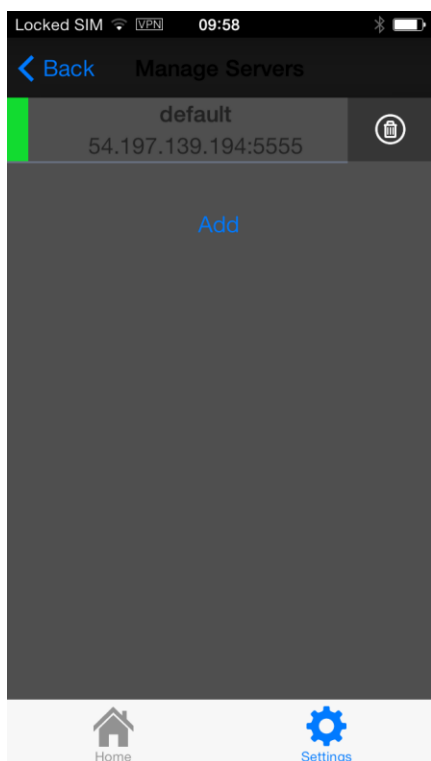
3.   The server settings page displays all server definitions:

■   A green bar on the left of the server description indicates the server selected for use. This does not indicate connection status. You cannot modify or delete a currently connected server definition.

■   Tap an existing server definition to modify the server name, host name or IP address, or the port number. You can apply any name you want to a server, this does not have to match the actual Integration Server instance name.

■   Tap **Add** to add a new server definition by typing in a server name, host name or IP address, and port number.

■   Tap the trash can button within a server definition to permanently remove the server.

■   Tap **Home** to return to the mobile task inbox.