SYBASE iAnywhere

Developer Quick Start Guide for M-Business Anywhere™

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About this guide

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Purpose of this guide

This *Developer Quick Start Guide for M-Business Anywhere, Version 6.7* is provided to help a developer who is new to the M-Business Anywhere™ environment achieve the following objectives within 30-60 minutes:

- Install M-Business Server
- Install M-Business Client on a mobile device
- Set up a test user on M-Business Server
- Set up a test channel on M-Business Server that will deliver web content to the mobile device
- Synchronize the mobile device with M-Business Server to download and view the test channel content

When you are finished with this guide, you will be ready to concentrate on the design issues involved in getting your target web content to work the way you want it to on the mobile devices that you must support.

Location of other M-Business Anywhere documentation

In order for the cross references to other M-Business Anywhere documents to work properly as clickable links, all of the M-Business Anywhere documentation PDF files must be located in the same directory.

♦ Downloading the complete set of M-Business Anywhere documentation

1. You may download the complete set of M-Business Anywhere documentation from:

   http://www.ianywhere.com/developer/product_manuals/mbusiness_anywhere/

2. Under "M-Business 5.7", in the row for the language you prefer, click thethe **Download PDF+** link, then unzip the files into one directory.

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What you need to continue

♦ Checking the system requirements

1. Make sure you have a workstation set up to use for testing.

   This workstation may be the same host machine on which M-Business Server will be installed, or any other workstation that can connect to the host over a network.

   Operating system - The workstation must have one of the following versions of Microsoft Windows:

   - Windows 2000 Professional with Service Pack 4
   - Windows XP Professional
   - Windows XP Home
   - Windows Vista Professional

   Browser - The workstation must have one of the following supported browsers:

   - Internet Explorer 5.5
   - Internet Explorer 6.0
   - Firefox 1.x

   > **Note**
   > You will need to log in as an administrator on the workstation in order to install the M-Business Client software.

2. Make sure you have a mobile device set up to use for testing.

   You need to have a mobile device with a cradle attached to the workstation from which you will access the M-Business Server Administrator Console and synchronize the device. If you are using a Windows XP workstation, the workstation itself can serve as the test device.

   Palm requirements - Palm OS devices running version 4.x or 5.x of Palm OS 2 MB free memory.

   Windows Mobile Pocket PC requirements - Windows Mobile Pocket PC devices, including Pocket PC and Handheld PC devices, running version 3.0 and using ARM processors with 2 MB free memory.

   Windows XP requirements - Windows XP Tablet Edition, or Windows XP Professional.

   Windows Mobile 5 or requirements - Windows Mobile 5 devices, including Windows Mobile and Handheld PC devices, running version 3.0 or Windows Mobile 5 with 2 MB free memory.

   Microsoft Smartphone requirements - Microsoft Smartphone devices running Windows Mobile 5 or Windows Mobile 2003 with 2 MB free memory.

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> **Note**
> Before proceeding, the device should already be set up to synchronize at your desktop workstation. Palm OS devices synchronize via HotSync. Windows XP devices synchronize directly via a network connection. Microsoft Smartphone synchronizes directly via the wireless phone connection.
> Other Microsoft OS devices synchronize via ActiveSync on Windows versions prior to Windows Vista. Windows Vista replaces ActiveSync with Mobile Device Center (MDC).
> If you want to use a If you have just received a new device, refer to the documentation that came with it to set it up correctly.

3. Make sure the Windows server on which you plan to install M-Business Server meets the following hardware and software requirements:

   - 2 GB RAM
   - Pentium 4 2.5 GHz or better CPU
   - One of the following operating systems:
     - Windows 2000 Server with Service Pack 4
     - Windows 2003 Server with Service Pack 1
     - Windows Vista Server

4. Make sure you have the admin user login information for the target server.

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CHAPTER 1

Developer Quick Start Guide

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Installing M-Business Server on Windows

Note
If you are upgrading an existing M-Business Anywhere installation, or installing on a Unix platform, this guide does not cover those situations. See the *Administrator Guide for M-Business Anywhere Server* for instructions. See "Location of other M-Business Anywhere documentation" on page vi for instructions on downloading this guide.

Follow the instructions below to perform a new installation of M-Business Server on a Windows machine. If you need more details on any of the steps, see "Upgrading and installing M-Business Server" [*M-Business Anywhere Administrator Guide*]. If this link does not work, see "Location of other M-Business Anywhere documentation" on page vi for instructions on downloading this guide.

♦ Preforming a new installation of M-Business Server on a Windows machine

1. On the target server, log in to Windows as an administrator.
2. Determine the port numbers that are already in use on the machine.

   Note
   The M-Business Server installer will use port number 80 by default. If port 80 is already in use, you will need to specify another port number which is *not* in use.

   - Open a browser window on the server and enter this URL:

     http://localhost:80

   - If a non-error page is displayed, it means that a web server on that machine is already using port 80 — try the URL above with different port numbers until you find one that is not in use, then make a note of that port number for later reference. Do *not* use port numbers 8091 or 8099 — these will automatically be used by M-Business Server.

3. Download the M-Business Server installer.

   - Open a browser and navigate to:

     http://www.ianywhere.com/downloads/

   - Click the **M-Business Anywhere Developer Edition** link.
   - Fill in the form for the evaluation download and read the license agreement.
   - Click the **Agree and Submit** button.
   - On the Download and Installation page, click the **click here** link in "To Begin Download Process Now, Please Click Here" in the middle of the page.

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- On the M-Business Anywhere 6.7 for Windows Download page, click the **Download** button to the left of "M-Business Anywhere for Windows".
- Save the installer file, ***MBAnywhereW.exe***, to a temporary location.

> **Note**
> Your license number will be sent to you at the email address you supply in this step. You can start the installer immediately, but you will not be able to complete the installation until you have received your license number.

4. Run the M-Business Server installer.

   - Open the folder where you just saved the installer and double-click the ***MBAnywhereW.exe*** file to start the InstallShield Wizard.

     Very quickly the Welcome panel appears.
   - Click **Next**.

     The Server License panel appears.
   - Enter your server license number in the Server License panel.

     Get this from the email sent to the email address you gave in step 3 above.
   - Accept the defaults on the next four panels until you reach the Sync Port panel. Here is the sequence you will see:
     - Server Functionality
     - License Agreement
     - Choose Destination Location
     - User Friendly Server Name

     The Sync Port panel is now displayed.
   - Enter a port number which is not in use on this machine.

     > **Caution**
     > If port 80 is already in use on the target machine, enter another port number which is *not* in use on the Sync Port panel.

   - Click **Next**.

     The UI Port panel appears.
   - Enter port numbers which are no in use on this machine for the next three panels. Here is the sequence you will see:

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- UI Port
- Database Port
- Soap Server Port

> **Caution**
> If any of the default port numbers are already in use on the target machine, enter another port number which is *not* in use.

The Host Name panel is now displayed.

- Click **Next** on the Host Name panel to start the M-Business Anywhere Setup process.

> **Note**
> On the InstallShield Wizard Complete panel, you can choose to restart your computer later, but you will not be able to continue with the steps that follow until you restart.

5. Verify that the installation was successful.

   - Restart the machine.
   - In a browser, navigate to **http://localhost:8091**.

     If the M-Business Anywhere login page appears, the install was successful — continue. If the login page does *not* appear, start over with step 1 above.

After you have verified that the install was successful, go on with the next section, "Setting up a mobile device, test user, and test channel" on page 5.

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Setting up a mobile device, test user, and test channel

- **Setting up a mobile device, test user, and test channel**

1. If the test device is a Windows XP Tablet, proceed to step 3.
2. If the test device is a different Microsoft OS device, or a Palm device, verify that the device is able to synchronize with your desktop workstation.

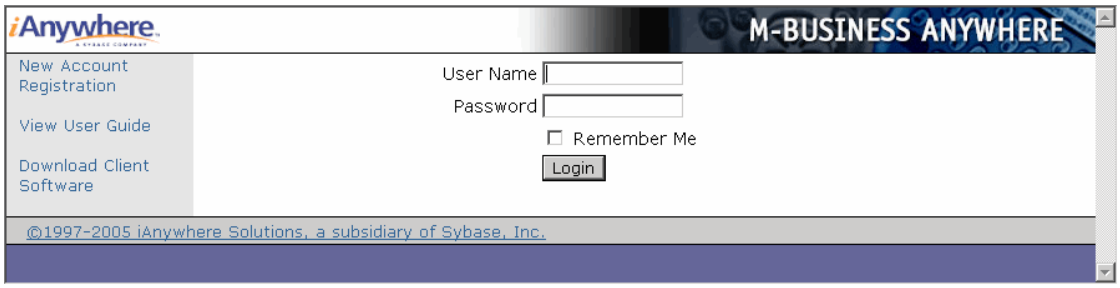
   Palm devices synchronize via HotSync and Microsoft OS devices synchronize via ActiveSync. Refer to the documentation that came with the device for detailed instructions.

   Once you have verified that the test device is able to synchronize, leave the device in its cradle.

   Caution
   Do not proceed until you are able to synchronize your device.

3. Open the M-Business Server Administrator Console.

   Navigate in your web browser to **http://localhost:8091**.



4. Click the **New Account Registration** link, at the top.

   The language preference screen appears (Step 1 of 7).

5. Click the language that you want, then click **Next**.

   The device operating system screen appears (Step 2 of 7).

6. Click the device operating system that you want.

   - **PalmOS** — for any Palm OS device (*not* for Palm-branded devices running a Microsoft OS)
   - **Pocket PC** — for non-phone devices with "Pocket PC" in the branding, including Windows Mobile 5 devices (the installer automatically detects older Pocket PC vs. newer Windows Mobile 5 Pocket PC and installs the correct version)
   - **PPC-Smartphone** — for Microsoft Smartphone devices (does not work with other "Smartphone" devices that do not have Microsoft in the branding)

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- **Windows** — for any device with a Windows XP operating system, for example, Tablet PCs and laptops

7. Click **Next**.

   The download screen appears (Step 3 of 7).

8. Click the link, **Click here to save the M-Business Client Software to your hard disk**.

   The File Download dialog appears.

9. Click **Save** to save the program to disk.

   The Save As dialog appears.

10. Select a folder into which the program file will be saved, then click **Save**.

    A Download dialog will show you the progress of the file transfer and display the message Download Complete when the file is copied into the folder you selected.

11. Click **Open** to start the InstallShield Wizard.

> **Note**
> If you have a secure digital (SD) card installed on your device, it will be detected by the M-Business Anywhere installer. For information on the options available when an SD card is detected, see "Installing M-Business Client to use a secure digital (SD) card on your Microsoft OS device" [*M-Business Anywhere Client User Guide*].

12. Follow the instructions on the screen to install M-Business Client on your desktop computer.

13. Click **OK** when you see the screen display a message telling you that M-Business Client will be installed to your device the next time you synchronize.

> **Note**
> M-Business Client also installs M-Business Connect on your desktop and mobile device. M-Business Connect enables M-Business Client to communicate with M-Business Server.

14. Return to your browser window where the download screen (Step 3 of 7) is still displayed.

15. In the download screen (Step 3 of 7) in your browser, click **Next**.

    The Install screen (Step 4 of 7) appears.

16. If you ran the installer file by clicking the Open button in the Download dialog, you can ignore this screen and just click **Next**.

    If you closed the Download dialog without running the installer file, follow the directions on the install screen (Step 4 of 7) and click **Next** after you are finished.

    The register screen (Step 5 of 7) appears.

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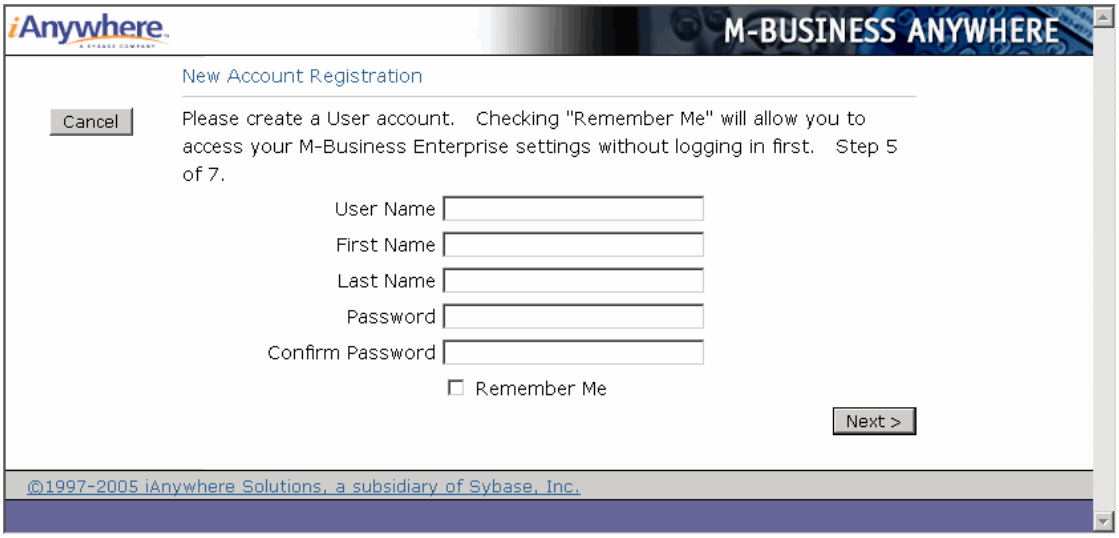
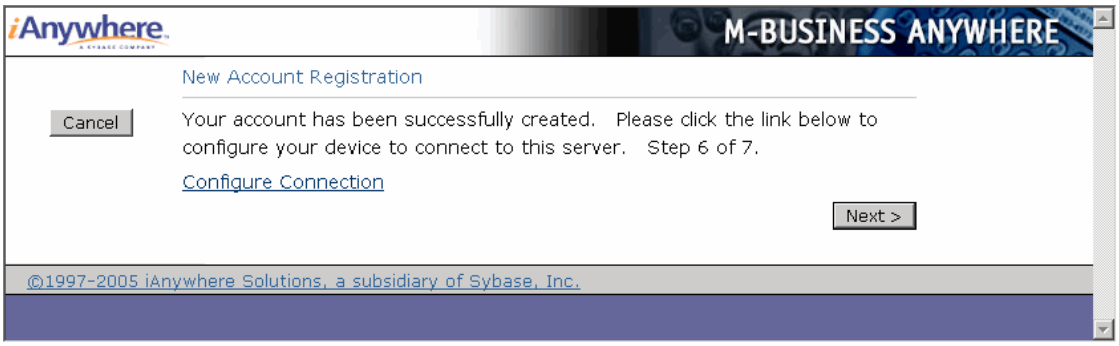


17. Enter your information in the **Username**, **First Name**, **Last Name**, **Password**, and **Confirm Password** fields.

    If you do not want to re-enter your user name and password every time you access your account, select the **Remember me** checkbox.

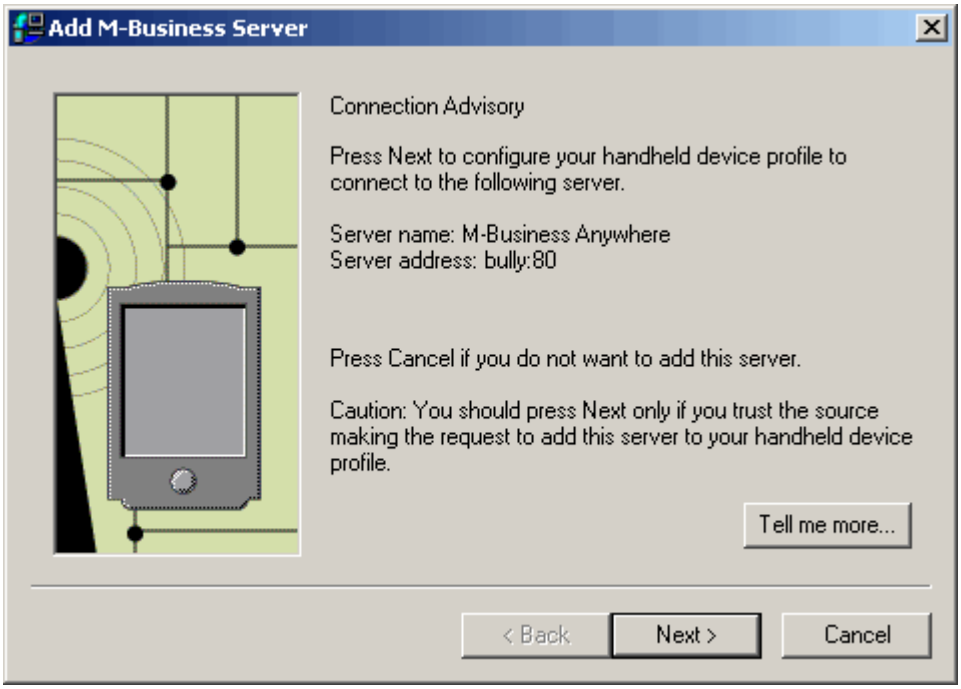
18. Click **Next**.

    The configure screen (Step 6 of 7) appears. You should see a message saying that your account has been successfully added to the server. If you do not see this message, contact your system administrator.



19. In the configure screen in your browser, click **Configure Connection**.

    The Add M-Business Serverdialog appears.



20. Click **Next**, then follow the directions on the following screens to configure your mobile device's connection to the server.
21. When you return to the configure screen in your browser, click **Next**.

    The Create a Channel for User... page appears.

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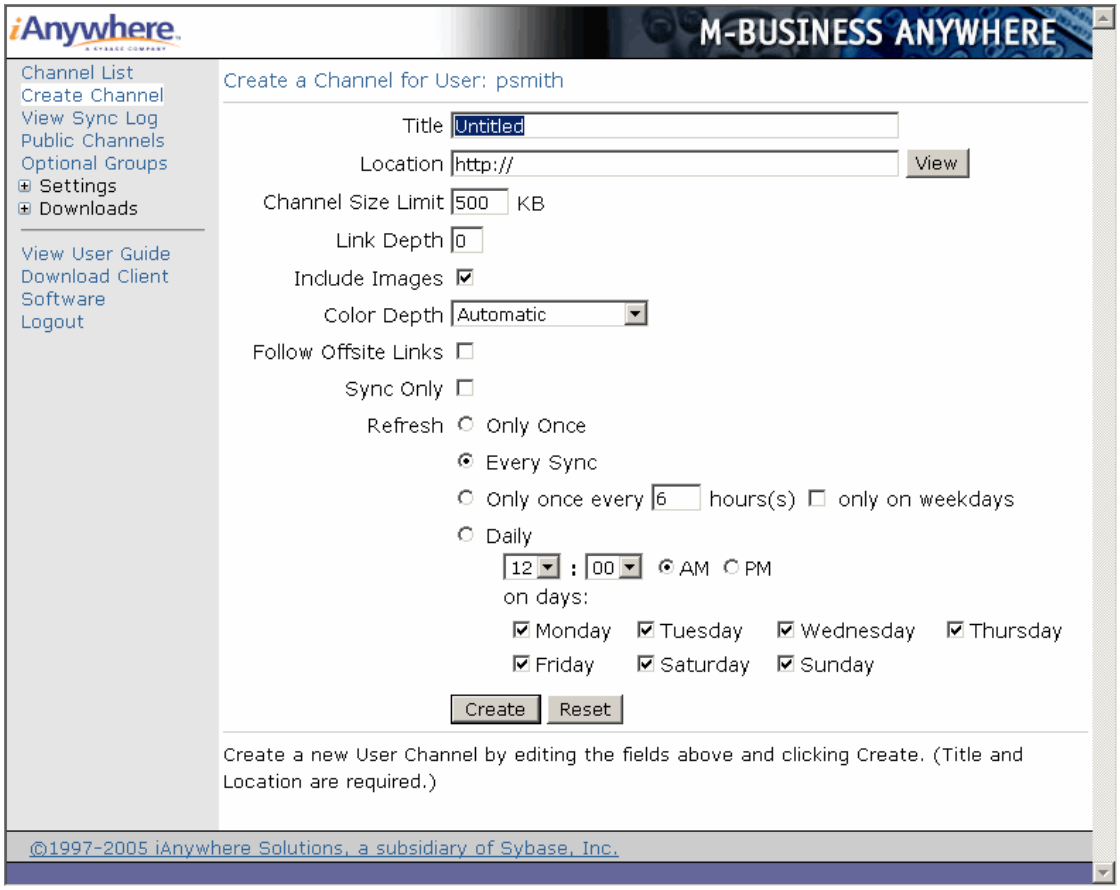

22. On the **Create a Channel for User** form, fill in these fields as follows:
    - for **Title**, enter **Google Test**
    - for **Location**, enter **http://www.google.com**
23. Click the **View** button to be sure the URL works.
24. Close the browser window opened by the View button.
25. If Google did not display, fix the URL and click the View button again.
26. Click the **Create** button at the bottom of the form to create the channel.

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Testing your device/user/channel setup

- **Testing your device/user/channel setup**

1. Synchronize your test device.

   See the documentation that came with your device for instructions.

2. If your test device is *not* a Windows XP device, synchronize again.

   On all platforms *except* Windows XP, the first synchronization simply installs M-Business Client on the device. The second synchronization downloads the test channel content — the Google home page.

3. Start up M-Business Client on the device.

   Palm OS devices:

   - tap the **Applications** silk-screen icon

   - tap the **M-Business Client** icon

   Windows Mobile Pocket PC devices:

   - tap **Start»Programs**
   - tap the **M-Business Client** icon

   Windows XP devices:

   - tap or click **Start»Programs**
   - tap or click the **M-Business Client** icon

   Windows Mobile 5 or 6 or Microsoft Smartphone devices:

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- choose **Start»M-Business Client**

4. Make sure the device is offline.

   Depending on your device and connection type, your device may be online after synchronizing. In order to see how M-Business Client handles offline form submissions in the steps below, your test device must be offline:

   Palm OS devices:

   - tap the **iAnywhere** page title to open the menus
   - on the **Channels** menu, tap **Work Offline**

   Windows Mobile Pocket PC devices:

   - tap the **Tools** menu, then tap **Work Offline** (if greyed out, device is already offline)

   Windows XP devices:

   - tap or click the **File** menu, then tap or click **Work Offline**

   Windows Mobile 5 or Microsoft Smartphone devices:

   - choose **Menu»Work Offline**

5. Under **Personal Channels**, tap the **Google Test** link to display your channel.

6. Look in the Forms Manager.

   Now that the test channel is properly synchronized to your device, we'll demonstrate a simple offline form submission. We'll use the Forms Manager on the device to view an empty forms queue, a forms queue with pending forms, and finally the successful results of our form submission. First view the empty forms queue:

   - **Palm OS devices** - tap the **Google Search** page title to open the menus, then on the **Channels** menu, tap **Forms Manager**.
   - **Windows Mobile Pocket PC devices** - tap the **View** menu at the lower left, then tap **Forms Manager**.

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- **Windows XP devices** - click or tap the **View** menu at the top, then tap **Forms Manager**.
- **Windows Mobile 5 or 6 or Microsoft Smartphone devices** - choose **View»Forms Manager**.

The Forms Manager opens, displaying a message beginning, "You have no pending form submissions...".

7. Perform a search.

   - Tap the **Back** button to return to the Google Search page.
   - Tap in the text field immediately above the Google Search button.
   - Type `w3c` as the search term.
   - Tap the **Google Search** button.

   A message is displayed indicating that your submission... will be sent during the next synchronization.

   - Tap **OK** to acknowledge the message and return to the Google Search page.

8. Perform another search.

   - Tap in the text field immediately above the Google Search button.
   - Type **`ieee`** as the search term.
   - Tap the **Google Search** button.
   - Tap **OK** to acknowledge the message.

9. Look in the Forms Manager again.

   - **Palm OS devices** - tap the **Google Search** page title to open the menus, then on the **Channels** menu, tap **Forms Manager**.
   - **Windows Mobile Pocket PC devices** - tap the **View** menu at the lower left, then tap **Forms Manager**.
   - **Windows XP devices** - tap or click the **View** menu at the top, then tap **Forms Manager**.
   - **Windows Mobile 5 or 6 or Microsoft Smartphone devices** - choose **View»Forms Manager**.

   The Forms Manager opens, this time displaying one entry for each search form you just submitted. The pending status indicates that these forms have been submitted offline on the device, but have not yet been submitted to the server in a synchronization.

10. Synchronize your test device.

    There are several different ways to synchronize your device. In order to ensure that your device remains in offline mode, use the method listed below for your platform:

    - **Palm OS devices** - synchronize the device through HotSync; see the documentation that came with the device for instructions.

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- **Windows Mobile 5 or 6 or Windows Mobile Pocket PC devices** - synchronize the device through ActiveSync. Typically you just place the device in the cradle; see the documentation that came with the device for instructions.
- **Windows XP devices** - in M-Business Client on the device, tap or click the **File** menu at the top, then tap **Sync**.
- **Microsoft Smartphone devices** - in M-Business Client on the device, choose **Menu»Sync All**.

When the synchronization is complete, M-Business Client on the device automatically returns to its home page.

11. Look in the Forms Manager again.

    - **Palm OS devices** - tap the **Google Search** page title to open the menus, then on the **Channels** menu, tap **Forms Manager**.
    - **Windows Mobile Pocket PC devices** - tap the **View** menu at the lower left, then tap **Forms Manager**.
    - **Windows XP devices** - tap or click the **View** menu at the top, then tap **Forms Manager**.
    - **Windows Mobile 5 or 6 or Microsoft Smartphone devices** - choose **View»Forms Manager**.

    The Forms Manager opens, still displaying one entry for each search form you submitted, but this time the success status indicates that these are the response forms returned by the server.

12. View your search results pages.

    - Tap the **success** link to display the search results for that form.
    - Tap the **Back** button to return to the Forms Manager to view the other search results page.

    Note
    Tapping any link on one of your search results pages will get a Page Not Available message. If you get this message now, tap the **Back** button to return to the Forms Manager.

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Next steps

After the Google Test channel synchronization is successful, to create an application or mobilize an existing desktop web application, continue with "Mobile application design guidelines" [*Introduction to M-Business Anywhere*]. If this link does not work, see "Location of other M-Business Anywhere documentation" on page vi for instructions on downloading this guide.

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