SYBASE®

Installation Guide

Unwired Accelerator

6.5

[Windows 2000]

Contents

About This Book

Audience This guide is for Sybase® system administrators and other qualified professionals who are familiar with their system's environment, networks, disk resources, and media devices.

How to use this book This book contains the following chapters:

- Chapter 1, "Overview," is the overview of the Unwired Accelerator installation.

- Chapter 2, "Installation Procedures," describes how to install Unwired Accelerator on your system, how to perform special installation procedures, and how to uninstall Unwired Accelerator.

- Chapter 3, "Getting Started," describes how to get started using the Portal Interface and the Mobile Web Studio.

- Appendix A, "Setting Up Authentication and Authorization," describes how to set up authentication and authorization using Tomcat, and either the portal database or a Lightweight Directory Access Protocol (LDAP) server.

- Appendix B, "Troubleshooting," provides troubleshooting information for common installation problems.

Related documents **Unwired Accelerator documentation**   The following Unwired Accelerator documents are available on the Getting Started with Unwired Accelerator CD:

- The Unwired Accelerator release bulletin for your platform contains last-minute information not documented elsewhere.

- The Unwired Accelerator installation guide (this book) for your platform contains installation instructions.

Enterprise Portal and Unwired Accelerator online documentation
The Unwired Accelerator documentation set includes:

- The *Enterprise Portal Developer's Guide* includes developer-related topics for Enterprise Portal and Unwired Accelerator components, Portal Interface portlets, and Java Template Framework pages.

- The *Portal Interface User's Guide* describes how to use Portal Interface to build and manage your enterprise's portal.

- The *Unwired Accelerator Quick Start Guide* shows how to deploy a Web and a database application to either a PDA or BlackBerry device.

- The *Unwired Accelerator Feature Guide* describes features available with version 6.5.

- The *Mobile Application Development Tutorial* provides tutorials that help you get started using Mobile Web Studio to develop and deploy mobile applications.

jConnect™ for JDBC™ documents   Unwired Accelerator 6.5 includes the jConnect for JDBC driver to allow JDBC access to Sybase database servers and gateways. The *Programmer's Reference jConnect for JDBC* is included on the SyBooks CD.

Other sources of information

Use the Sybase Getting Started CD, the SyBooks CD, and the Sybase Product Manuals Web site to learn more about your product:

- The Getting Started CD contains release bulletins and installation guides in PDF format, and may also contain other documents or updated information not included on the SyBooks CD. It is included with your software. To read or print documents on the Getting Started CD, you need Adobe Acrobat Reader, which you can download at no charge from the Adobe Web site using a link provided on the CD.

- The SyBooks CD contains product manuals and is included with your software. The Eclipse-based SyBooks browser allows you to access the manuals in an easy-to-use, HTML-based format.

   Some documentation may be provided in PDF format, which you can access through the PDF directory on the SyBooks CD. To read or print the PDF files, you need Adobe Acrobat Reader.

   Refer to the *SyBooks Installation Guide* on the Getting Started CD, or the *README.txt* file on the SyBooks CD for instructions on installing and starting SyBooks.

- The Sybase Product Manuals Web site is an online version of the SyBooks CD that you can access using a standard Web browser. In addition to product manuals, you will find links to EBFs/Maintenance, Technical Documents, Case Management, Solved Cases, newsgroups, and the Sybase Developer Network.

   To access the Sybase Product Manuals Web site, go to Product Manuals at http://www.sybase.com/support/manuals/.

Sybase certifications on the Web   Technical documentation at the Sybase Web site is updated frequently.

❖ **Finding the latest information on product certifications**

1   Point your Web browser to Technical Documents at
    http://www.sybase.com/support/techdocs/.

2   Select Products from the navigation bar on the left.

3   Select a product name from the product list and click Go.

4   Select the Certification Report filter, specify a time frame, and click Go.

5   Click a Certification Report title to display the report.

❖ **Creating a personalized view of the Sybase Web site (including support pages)**

Set up a MySybase profile. MySybase is a free service that allows you to create a personalized view of Sybase Web pages.

1   Point your Web browser to Technical Documents at
    http://www.sybase.com/support/techdocs/.

2   Click MySybase and create a MySybase profile.

Sybase EBFs and software maintenance

❖ **Finding the latest information on EBFs and software maintenance**

1   Point your Web browser to the Sybase Support Page at
    http://www.sybase.com/support.

2   Select EBFs/Maintenance. Enter user name and password information, if prompted (for existing Web accounts) or create a new account (a free service).

3   Select a product.

4   Specify a time frame and click Go.

5   Click the Info icon to display the EBF/Maintenance report, or click the product description to download the software.

Conventions   The syntax conventions used in this manual are:

Key	Definition
commands and methods	Command names, command option names, utility names, utility flags, Java methods/classes/packages, and other keywords are in lowercase Arial font.
variable	Italic font indicates: • Program variables, such as *myServer* • Parts of input text that must be substituted; for example: *Server*.log • File names
%SYBASE%	Variable used to represent the Sybase Unwired Accelerator installation directory.
File | Save	Menu names and menu items are displayed in plain text. The vertical bar shows you how to navigate menu selections. For example, File | Save indicates "select Save from the File menu."
package 1	Monospace font indicates: • Information that you enter in a GUI interface, a command line, or as program text • Sample program fragments • Sample output fragments

Note The installation and post-installation instructions refer to the %SYBASE%, %MBUSINESS_SERVER%, %RIM%, and %JAVA_HOME% variables.

%SYBASE% refers to the Unwired Accelerator installation directory; for example, *C:Sybase* or *C:\Sybase\UA_65*.

%MBUSINESS_SERVER% refers to the M-Business Anywhere server installation directory; for example, *C:\MBiz*.

%RIM% refers to the Research in Motion installation directory; for example, *C:\Program Files\Research In Motion* or *C:\RIM*.

%JAVA_HOME% refers to a valid JVM directory.

If you need help   Each Sybase installation that has purchased a support contract has one or more
designated people who are authorized to contact Sybase Technical Support. If
you cannot resolve a problem using the manuals or online help, please have the
designated person contact Sybase Technical Support or the Sybase subsidiary
in your area.

CHAPTER 1   **Overview**

This guide explains how to install and configure Sybase Unwired
Accelerator.

Topic	Page
Product summary	1

Product summary

This installation guide is for Sybase Unwired Accelerator, which is
compatible with the following platform and operating system
configurations:

*   Microsoft Windows 2000

*   Mobile device, online access:

    *   PocketPC 2003

    *   Motorola MPx200 (Windows Mobile OS)

    *   HandSpring Treo 600 (PalmOne OS)

    *   Sony Ericsson P900 (Symbian OS)

    *   BlackBerry

*   Mobile device, offline access:

    *   PocketPC

    *   Palm

    *   Symbian

    *   M-Business Anywhere Client

    *   BlackBerry

The Unwired Accelerator unwires, or mobilizes, enterprise applications and data, so end users can be productive and effective inside or outside the office. They can access the same applications and tools at anytime, anywhere, on a mobile device.

Unwired Accelerator enables you to rapidly mobilize existing enterprise Web applications and data sources such as databases and Web services for both online and offline Web access. You need not rewrite or modify your existing applications or infrastructure.

CHAPTER 2 **Installation Procedures**

This chapter describes how to install Unwired Accelerator on Windows 2000.

The application database is supported on Adaptive Server Anywhere (ASA). A Web browser provides access to Mobile Web Studio and Portal Interface.

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System requirements

Table 2-1 lists system requirements.

Note Go to the Technical Library Product Manuals Web site at http://www.sybase.com/support/manuals, or see the release bulletin for your platform for components that require operating system patches.

Table 2-1: System requirements

Platform and OS	Release level	RAM	Disk space	Network protocol	Web browser
Windows 2000 minimum 750Mhz	Service Pack 2+	512 MB recommended	500MB minimum, 1G recommended	TCP, IPX/SPX, and Named Pipes	To access Portal Interface, use Internet Explorer version 5.5+, or Netscape Navigator 7.01+. To access Mobile Web Studio, use Internet Explorer versions 5.5 and 6.0.

Unwired Accelerator default values

Table 2-2 lists the default values for the user names, passwords, and port numbers for Unwired Accelerator.

Table 2-2: Unwired Accelerator default installation values

Component	Default values	Description
Local Host Machine		
Local host machine name		The machine name; for example, "lab2k."
Unwired Accelerator port	4040	
Unwired Accelerator HTTPS port	4443	
Adaptive Server Anywhere		
ASA port	4747	
ASA administrator user name	dba	This is the user name used to log in to Adaptive Server Anywhere.
ASA administrator password	SQL	This is the password used to log in to Adaptive Server Anywhere.
M-Business Anywhere		
Administrative user name	admin	Use this to log in to M-Business Server as an administrator.
Administrative password	none	
Admin port	8091	
JDBC connection port	8099	Default database port.
M-Business client port	8092	M-Business Anywhere "synch" port.

Component	Default values	Description
Mobile Web Studio		
User name/password	masuper/m8super	Created automatically during installation.

Note If you are using Netscape 7.0.*x* for Web browser access, and using HTTPS to protect passwords during login, you must use port 80 for the Unwired Accelerator HTTP port and 443 for the Unwired Accelerator HTTPS port.

Pre-installation tasks

Before you install Unwired Accelerator, you must:

- Verify that you have 512MB free space in your temporary directory, otherwise, the installation fails.

- Verify that you have write permission on the directory where you install the software, and on the *x:\tmp\logs* directory (where *x:* is the installation drive). If the *logs* directory does not exist, create it.

- Know the domain name of the machine where you are installing Unwired Accelerator. To find your domain name, contact your system administrator, or at a command prompt, enter:

      ipconfig /all

  Your domain displays in the "Connection-specific DNS Suffix" setting; for example, sybase.com. If you do not see your domian name, obtain the value from your system administrator.

Installation tasks

Typically, you install Unwired Accelerator in a network environment.

This section discusses installing Unwired Accelerator in a network environment. Installation takes five to ten minutes, depending on the speed of your machine.

❖ **Installing Unwired Accelerator**

1   Create an installation directory in which to install Unwired Accelerator; for example, *C:\Sybase*. This directory is referred to as %SYBASE% in this guide.

Note Do not use spaces in the directory name. Due to a problem with Tomcat, when you install into a directory with spaces in the name, Unwired Accelerator does not run properly.

---

2   Copy the *UA65.zip* file from the CD into the installation directory.

3   Extract the *UA65.zip* file into the installation directory. The command for extracting the file depends on the zip utility you are using.

Note Make sure the zip utility allows the archive to create new folders in the location where you unzip it.

---

4   Run the `config` file to set up the portal to be available to all machines that can reach it on the network. By default, Unwired Accelerator is configured to use *demo.sybase.com:4040* for the host, domain, and port. The `config` file modifies the host and domain values for your environment.

To run config:

a   Open a Command Prompt window, and navigate to:

```
%SYBASE%\UA65
```

b   Enter the following command to change both the host name and your domain in the *global.properties.xml* file (substitute your domain):

```
config domain
```

For example, if your domain is acme.org, enter:

```
config acme.org
```

Alternatively, enter the following command to change only the host name in the *global.properties.xml* file, or double-click the file in Windows Explorer:

```
config
```

This command modifies:

- *global.properties.xml* – changes the host name to the machine's name, and the domain name to the name you provided in the command. The *global properties.xml* file is located in *%SYBASE%\UA65\tomcat\webapps\onepage\config* and contains many system settings.

- *domain.js* – changes the domain name to the name you provided in the command. The *domain.js* file is located in *%SYBASE%\UA65\tomcat\webapps\onepage\javascript*.

Note The config file can only be run once to configure the domain name, since it changes the default name to the name you provide, and cannot be used to reconfigure the domain name. If you enter the domain name incorrectly, you must manually correct the domain value in the *global.properties.xml* and *domain.js* files.

---

5   If necessary, modify the *global.properties.xml* file. By default, the domain name in the *global.properties.xml* file is "sybase.com" and the Unwired Accelerator port is 4040. You may want to change the file if you:

- Did not supply the domain name in the preceding step.

- Supplied an incorrect domain name in the preceding step.

- Want to change the port number, if 4040 is already used.

To modify *global.properties.xml*:

a   Use a text editor to open the *global.properties.xml* file, located in *%SYBASE%\UA65\tomcat\webapps\onepage\config*.

b   Search for all instances of sybase.com, and replace each instance with your domain name.

c   Search for all instances of 4040, and replace each instance with the new port number (if necessary, usually the default is fine).

d   Save the *global.properties.xml* file and close it.

6   If you did not change the port number in the preceding step, you can skip this step.

If you changed the port number in the preceding step, you must also change the port number in the *server.xml* file.

To modify *server.xml*:

a   Use a text editor to open the *server.xml* file, located in *%SYBASE%\UA65\tomcat\conf*.

b   Search for all instances of 4040, and replace each instance with the new port number, if you changed it in the *global.properties.xml* file.

c   Save the *server.xml* file and close it.

7   From the Command Prompt window, navigate to *%SYBASE%\UA65* and enter startdb, or double-click the file in Windows Explorer.

This starts the Adaptive Server Anywhere database. When the database starts, you see the icon for the Sybase ASA database in your taskbar.

8   From the Command Prompt window, enter starttomcat, or double-click the file in Windows Explorer.

When Tomcat starts, you see a series of messages, including the following:

```
Starting service Tomcat-Standalone
Apache Tomcat/4.1.29
```

When you see this message, minimize the Tomcat window (do not close the window). You can ignore the rest of the messages.

If you do not see this message, you can check the *datamanager.log*, located in *x:\tmp\logs*, for more information

9   The Unwired Accelerator installation is complete. See "Verifying the installation" on page 9 to make sure the network installation works correctly.

Post-installation tasks

This section describes post-installation tasks.

•   Verifying the installation

•   Configuring for a proxy server

•   Updating digital certificates

•   Installing M-Business Anywhere server and client software

•   Installing RIM BlackBerry server and client software

•   Installing Answers Anywhere server software

Verifying the installation

Verify that your Unwired Accelerator installation is operating correctly by checking the following installations:

- Portal Interface

- Mobile Web Studio

❖ **Checking the installations**

1 Verify the Portal Interface installation by opening a browser window and entering:

```
http://hostname.domain:port/onepage/mpindex.jsp
```

where:

- *hostname* – is the name of the machine where you installed Unwired Accelerator; for example, "lab2k."

- *domain* – is the domain name where the installation is located; for example, "sybase.com."

- *port* – is the Unwired Accelerator port number (the default is 4040).

For example:

```
http://lab2k.sybase.com:4040/onepage/mpindex.jsp
```

2 Click Join Now to set up a new user profile; use your initials for the member name and password, and PortalUser for the role. See "Getting started with Portal Interface" on page 37.

3 Verify the Mobile Web Studio installation by opening another browser window and navigating to:

```
http://hostname.domain:port/onepage/index.html
```

For example, if your machine's name is "lab2k," your portal domain is "sybase.com," and your HTTP port number is "4040," enter:

```
http://lab2k.sybase.com:4040/onepage/index.html
```

Note Mobile Web Studio 6.5 is accessible only through Microsoft Internet Explorer 5.5 and 6.0.

The Mobile Web Studio window, and a window with a Close button opens.

Note If the Mobile Web Studio window does not display, see Table B-1 on page 58 for information.

4 In Mobile Web Studio, log in using `masuper` as the user name, and `m8super` as the password. See "Getting started with Mobile Web Studio" on page 39.

5 Minimize the window that includes the Close button.

Configuring for a proxy server

If you are using a proxy server, you must configure Unwired Accelerator with the appropriate proxy settings.

❖ **Using Unwired Accelerator behind a proxy server**

1 Go to *%SYBASE%\UA65\tomcat\webapps\onepage\config*.

2 Using a text editor, open *global.properties.xml* and change the proxy value to "on." For example:

```
Property name="proxy" value="on"
description="(on/off). on ONLY if a squid type http
proxy is installed/available" menugroup="10"/
```

3 Change the proxy.host value to the IP address or host name of the proxy server. For example, if your proxy server host name is "proxy.hostname.com," the line looks like this:

```
Property name="proxy.host"
value="proxy.hostname.com"
description="(127.0.0.1). configure only if
proxy=on. IP of the squid server" menugroup="100"/
```

4 Change the proxy.port value to the port number on which the proxy server is running. For example, if the port is 1234, the line looks like this:

```
Property name ="proxy.port" value="1234"
description= "(3128). configure only if proxy=on.
port where squid cache is running" menugroup="100"/
```

5   To the proxy.bypass_list value, add the IP addresses or host names that should bypass the proxy server. You must keep the loopback address and local host in the bypass list. For example, if you want requests for URLs that end with "sybase.com" or start with "syberspace" to bypass the proxy server, enter:

```
Property name="proxy.bypass_list" value
="127.0.0.1|localhost|sybase.com|syberspace"
description="(host1|host2). please read
HTTPConnection javadocs for info on dontProxyFor()
method for more info" menugroup="100"/
```

Updating digital certificates

User authentication for the portal uses HTTPS, which uses Secure Sockets Layer (SSL) for posting the user names and passwords that users enter in an encrypted form over a secure channel. SSL and HTTPS rely on the usage of digital certificates, which are typically verified and signed by third-party trust authorities.

Unwired Accelerator uses a certificate that is created using the keytool utility that ships with Java Development Kit (JDK) 1.4.*x*. This certificate is not signed by any trusted authority; therefore, you see the Security Alert pop-up when you sign in with your user name and password. Replace the *.keystore* file in the product folder with your certificate file of the same name.

Installing M-Business Anywhere server and client software

Unwired Accelerator integrates with Mobile Web Studio and M-Business Anywhere development environments. This enables you to quickly develop mobile applications and deploy them to both the Web and mobile devices. Integration enables you to manage applications, group applications, channels, groups, and users through Mobile Web Studio and M-Business Anywhere user interfaces.

Note If you plan to use M-Business Anywhere server to deploy applications to mobile devices, including BlackBerry devices, use this section. If you plan to only use RIM's BlackBerry Enterprise Server (BES) to deploy applications to BlackBerry devices, skip this section and follow the procedures in "Installing RIM BlackBerry server and client software" on page 21.

This section describes the following topics:

- Installing:

    - M-Business Anywhere server and client software

    - Installing mobile device software (Palm OS, Pocket PC, and RIM BlackBerry)

- Configuring communications between:

    - M-Business Anywhere server and client software

    - Mobile Web Studio and M-Business Anywhere server

    - M-Business Anywhere server and mobile devices

- Uninstalling M-Business Anywhere software (if needed)

Unwired Accelerator includes five developer licenses for M-Business Anywhere. You can download M-Business Anywhere Server and M-Business Client from the Web. To deploy applications to M-Business Anywhere, you must purchase a deployment license.

When you purchase Unwired Accelerator, you receive an order-confirmation e-mail that includes:

- M-Business Anywhere URL – you need this URL to download the M-Business Anywhere software.

- Password – you may be prompted to supply this password when you access the M-Business Anywhere URL to download the software.

- License key – you must supply the license key when you install the M-Business Anywhere software.

Installing M-Business Anywhere server and client

This section describes how to install M-Business Anywhere server and client software, and to integrate M-Business Anywhere with Unwired Accelerator.

Typically, M-Business Anywhere is installed on the same machine as Unwired Accelerator, but you can install it on any supported machine or platform. If you install on different machines, you must make some configuration changes.

Note Mobile applications deployed through M-Business Anywhere require database PODs to run on mobile devices. PODs are binary files compiled from C code to access the Client Extension API. PODs are installed automatically during installation, and enable you to run applications even when the mobile devices are not connected to the server.

For more POD information, see *Administrator Guide for M-Business Server* (located at http://*hostname*:8091/enterprise_doc/Admin_MBiz.pdf, where *hostname* is the machine on which the M-Business Anywhere server is installed).

❖ **Installing M-Business Anywhere server/client on Windows**

In this step, download and install the M-Business Anywhere server and client software on Windows, and mobile device software. In later steps, you will make configuration changes.

1   Before you begin, stop the Tomcat application server and the Unwired Accelerator ASA database using the instructions in "Starting and stopping the system" on page 42.

Note If the ASA database is running, you cannot configure the M-Business Anywhere server and start its processes successfully.

---

2   Download the M-Business Anywhere development software using the URL and password that was sent to you in the order-confirmation e-mail.

Select M-Business Anywhere Developer Edition, and follow the online instructions for downloading.

3   Install M-Business Server, keeping the following in mind:

•   When prompted for a license key, enter the license key that was sent to you in the order-confirmation e-mail when you purchased Unwired Accelerator.

- When prompted for "sync server port," enter 8092 (to prevent port conflicts with port 80, which is used by many Web servers).

Note The M-Business Anywhere installation directory is referred to as %MBUSINESS_SERVER% in this document.

4   Download the M-Business Anywhere client software for your mobile device, using the URL and password that was sent to you in the order-confirmation e-mail.

5   Install the M-Business Anywhere client software.

6   Open a Web browser and enter the M-Business Anywhere administrative URL:

```
http://hostname:8091
```

Where *hostname* is the machine on which the M-Business Anywhere server software is installed, such as "lab2k."

The M-Business Anywhere login screen displays.

Note The administrative login is "admin," with no password, but you do not have to log in at this time. You can view the *M-Business Client User Guide* from the login screen, or at http://*hostname*:8091/enterprise_doc/Admin_MBiz.pdf.

7   From the M-Business Anywhere login screen, download the M-Business Anywhere client software for your mobile device:

a   Select "Download Client Software Only."

b   Select the language.

c   Select the client software to download for your mobile device.

- PalmOS – install Palm Desktop 4.*x* with HotSync.

- Microsoft PocketPC 2003 – install ActiveSync 3.7.*x*.

- RIM BlackBerry – install ActiveSync 3.7.*x*. Use this option to use M-Business Anywhere and ActiveSync to deploy applications to BlackBerry.

Note For other mobile devices, obtain client software from the manufacturer.

d   Use the online help for the selected device to install, configure, and synchronize the software for your mobile device. See "Connecting clients with the M-Business Anywhere server" on page 15 for M-Business Connect procedures.

Once you create mobile applications with Mobile Web Studio, and synchronize, you will see the applications on the mobile device. To create mobile applications, see these Unwired Accelerator documents:

- *Quick Start Guide*

- *Mobile Application Development Tutorial*

8   Restart the ASA database and Tomcat application server using instructions in "Starting and stopping the system" on page 42.

Connecting clients with the M-Business Anywhere server

You must also create a connection from the M-Business Anywhere client software to the M-Business Anywhere server for each user created.

❖ **Connecting M-Business Anywhere and client software**

1   From the desktop or mobile device, select Start | Programs | M-Business Client | M-Business Connect.

For some mobile devices, if you have synchronized before, use Start | Programs | M-Business Client | Tools | Server Options.

2   On the M-Business Connect window, select Properties.

3   On Edit Server Profile window, specify the connection information:

- Hostname – specify your machine name, such as lab2k.

- Port – specify the port number, such as 8092. This is the M-Business client port (or "sync port") described in Table 2-2 on page 4.

- Your account – enter the M-Business user name and password. See "Self-registration" on page 18 for user account information.

- Connection options – select "Connect to this server during device synchronizations," and "Refresh all content at next sync."

4   Optionally, select Test to test the client-to-server connection. If the test fails, make sure you entered the connection values correctly.

5   Click OK to save the changes.

6   Close the M-Business Connect window.

Configuring M-Business Anywhere

This section describes configuration settings needed for:

- M-Business Anywhere server and client communication

- M-Business Anywhere and Unwired Accelerator integration

Make configuration changes in the following files:

- *global.properties.xml* – see "Configuring global.properties.xml" on page 17.

- *server.xml* – see "Configuring server.xml" on page 19.

Note If you installed the M-Business Anywhere server and Unwired Accelerator on different machines, modify the following files:

- *gridlayout1.jsp* – see "Configuring gridlayout.jsp" on page 16.

- *server.xml* – see "Configuring server.xml" on page 19.

Configuring *gridlayout.jsp*

If you installed M-Business Anywhere server on a different machine than Unwired Accelerator, change the localhost alias in *gridlayout1.jsp* to the machine name on which the M-Business Anywhere server was installed.

1 In a text editor, open the *gridlayout1.jsp* file (located in the *%SYBASE%/UA65/tomcat/webapps/onepage/portlets/templates/ mobile* directory).

2 Search for: String MS_ROOT_URL = "http://localhost:8091"

3 Replace localhost with the name of the M-Business Anywhere server name and port. This is not required if M-Business Anywhere and Unwired Accelerator are installed on the same machine.

4   Save and close the file.

Note Database PODs are installed once you modify this file. PODs are binary files compiled from C code to access the Client Extension API. PODs are installed automatically during installation, and enable you to run applications even when the mobile devices are not connected to the server.

For more POD information, see *Administrator Guide for M-Business Server* (located at http://*hostname*:8091/enterprise_doc/Admin_MBiz.pdf, where *hostname* is the machine on which the M-Business Anywhere server is installed).

Configuring *global.properties.xml*

This section describes settings in the *global.properties.xml* file used to integrate M-Business Anywhere and Mobile Web Studio. The settings include:

- MB.Enabled – enables connection from Mobile Web Studio to the M-Business Anywhere database, AGDB.

- MB.AutoRegistration – determines how user accounts are handled between Mobile Web Studio and M-Business Anywhere. See "Self-registration" on page 18 for information.

- alwaysValidateSession – enables personal channels to work properly on mobile devices.

❖ **Modifying the *global.properties.xml* file**

1   In a text editor, open *global.properties.xml* (located in *%SYBASE%\UA65\tomcat\webapps\onepage\config*).

2   Search the file for: `<Property name="MB.Enabled"`.

By default, MB.Enabled is set to false. Set it to true as shown below to enable M-Business Anywhere integration with Portal Interface and Mobile Web Studio. You must also set the AGDB connection information in the *server.xml* file, as described in "Configuring server.xml" on page 19.

```
<PropertyGroup name="MBusinessGroup" descripton=
"properties for configuring M-Business Server in the
Portal and Studio.">
   <Property name="MB.Enabled" value="true"
   description="(true/false) true to enable
   MBusinessintegration Portal and Studio.
```

```
        false to disable it." menugroup="10"/>
    </PropertyGroup>
```

Change the value if necessary.

3   Search the file for: `<Property name="MB.AutoRegistration"`.

By default, MB.AutoRegistration is set to false as shown:

```
<Property name="MB.AutoRegistration" value="false"
description="(true/false) true to enable auto MBusiness
user registration when a user is created in EP. false
to disable it." menugroup="10" />
```

Change the value if necessary, using information about the MB.AutoRegistration parameter in "Self-registration" on page 18.

4   Search the file for: `<Property name="alwaysValidateSession"`.

By default, alwaysValidateSession is set to true. For personal channels to work properly on a mobile device or Portal Interface, make sure alwaysValidateSession is set to false. Otherwise, you see a message similar to "Your submission has been recorded and will be sent during the next Synchronization" when you try to access an application on the PDA or mobile device.

Change the value if necessary.

5   Save the file and close it.

Self-registration   The *global.properties.xml* property, MB.AutoRegistration, determines how user accounts are handled when Unwired Accelerator and M-Business Anywhere are integrated.

*   If MB.AutoRegistration is set to true, when a user joins the Portal Interface, or a user is added to Mobile Web Studio, the user automatically joins the M-Business Anywhere server with the same user name and password.

*   If MB.AutoRegistration is set to false, Mobile Web Studio does not self-register to M-Business Anywhere. The Studio Admin user can register a Mobile Web Studio user in M-Business Anywhere using M-Business | User/Roles, and selecting "Create M-Business user."

If a Mobile Web Studio user already exists, but does not have an account in M-Business Anywhere, the M-Business Anywhere administrator can create an account for the user, or the Mobile Web Studio user can self-register in M-Business server or in Mobile Web Studio.

Note The user names in Mobile Web Studio and M-Business Anywhere server must match. If you create a user in M-Business Anywhere, an account is not created for the user in Mobile Web Studio.

Configuring *server.xml*

Set the JDBC connection from Mobile Web Studio to the AGDB database in *server.xml*. JDBC connections to these databases are also established in this file:

- portaldatabase

- sampledb

- mpharma

- msales

❖ **Configuring the *server.xml* file**

1 In a text editor, open *server.xml* (located in *%SYBASE%\UA65\tomcat\conf*).

2 Search for `"jdbc/agdb` (including the quotation mark).

3 Review the defaults or set the correct values for these parameters:

- url – typically, you do not modify the JDBC connection URL for the M-Business Anywhere database (AGDB). M-Business server uses port 8099, and the default URL is:

```
jdbc:sybase:Tds:localhost:8099</value>
```

Note If you installed the M-Business Anywhere server on a machine other than Unwired Accelerator, modify the JDBC connection URL. Change `localhost` to the name of the machine on which the M-Business Anywhere server was installed.

- username – enter the AGDB user name. The default is "dba".

- password – enter the AGDB user password. The default is "SQL".

- maxActive – enter the maximum number of connections. The default is 20.

- maxWait – enter the maximum wait period. The default is 20000.

- removeAbandoned – indicate whether to remove abandoned connections. The default is false.

- logAbandoned – indicate whether to log abandoned connections. The default is false.

These are the default parameters in *server.xml*:

```xml
<ResourceParams name="jdbc/agdb">
  <parameter>
    <name>driverClassName</name>
    <value>com.sybase.jdbc2.jdbc.SybDriver</value>
  </parameter>
  <parameter>
    <name>url</name>
    <value>jdbc:sybase:Tds:localhost:8099</value>
  </parameter>
    <parameter>
    <name>username</name>
    <value>dba</value>
  </parameter>
  <parameter>
    <name>password</name>
    <value>SQL</value>
  </parameter>
  <parameter>
    <name>maxActive</name>
    <value>20</value>
  </parameter>
  <parameter>
    <name>maxIdle</name>
    <value>10</value>
  </parameter>
  <parameter>
    <name>maxWait</name>
    <value>20000</value>
  </parameter>
  <parameter>
    <name>removeAbandoned</name>
    <value>false</value>
  </parameter>
  <parameter>
    <name>removeAbandonedTimeout</name>
```

```
      <value>60</value>
    </parameter>
    <parameter>
      <name>logAbandoned</name>
      <value>false</value>
    </parameter>
   </ResourceParams>
```

4   Save the file and close it.

Uninstalling M-Business Anywhere

Uninstalling M-Business Anywhere on Windows removes the M-Business Anywhere server and the database of user, group, and channel information. To preserve the database, move the *%MBUSINESS_SERVER%\avantgoserver\ASA\data* directory to a new location before uninstalling.

❖   **Uninstalling the M-Business Anywhere server on Windows**

1   Stop the Tomcat application server and the Unwired Accelerator ASA database using the instructions in "Starting and stopping the Tomcat application server" on page 43.

2   Select Start | Settings | Control Panel | Add/Remove Programs.

3   Remove M-Business Anywhere server and client software.

4   Restart the Tomcat application server and the ASA database.

Installing RIM BlackBerry server and client software

This section provides the following information for setting up Research In Motion's (RIM) BlackBerry server and client software:

• Guidelines for setting up the RIM BlackBerry server and client software [if you are using RIM's BlackBerry Enterprise Server (BES) to deploy applications, instead of using M-Business Anywhere server].

• Procedures for setting up the Unwired Accelerator offline client software for the RIM BlackBerry mobile device.

• Procedures for setting up an Unwired Accelerator user on the BlackBerry device.

Guidelines for installing BlackBerry server and client software

This section provides guidelines and requirements if you plan to use RIM's BES to deploy applications to BlackBerry devices. If you plan to use M-Business Anywhere server to deploy applications to BlackBerry devices, you do not need this section (use the procedures in "Installing M-Business Anywhere server and client software" on page 11 instead).

Before you install the offline client on the BlackBerry device, make sure:

- The RIM BES software is installed and configured correctly, using RIM's installation documentation.

- The RIM BlackBerry Desktop Manager software is installed and configured correctly. Unwired Accelerator's minimum requirement for the BlackBerry Desktop Manager software is version 3.6 SP3a.

- The BlackBerry device has connectivity with BES, and that you can synchronize between BES and the BlackBerry device.

Note If you do not have a BlackBerry device, a simulator is available for download from RIM. Go to www.blackberry.net/developers/ to access the Developers window; select the Download link under "What's New;" and look for the BlackBerry Handheld Simulators section. (For simulator documentation, access the Developer's window; select the Developer Documentation link under "Development Questions;" and scroll down to the Simulator section).

Installing offline client on BlackBerry device

This section shows how to install the Unwired Accelerator offline client application on a BlackBerry device. The offline client enables you to use the applications you create through Unwired Accelerator on your BlackBerry device in offline mode. Information is also provided for setting up the offline client on the BlackBerry simulator, which is available for download from Research in Motion.
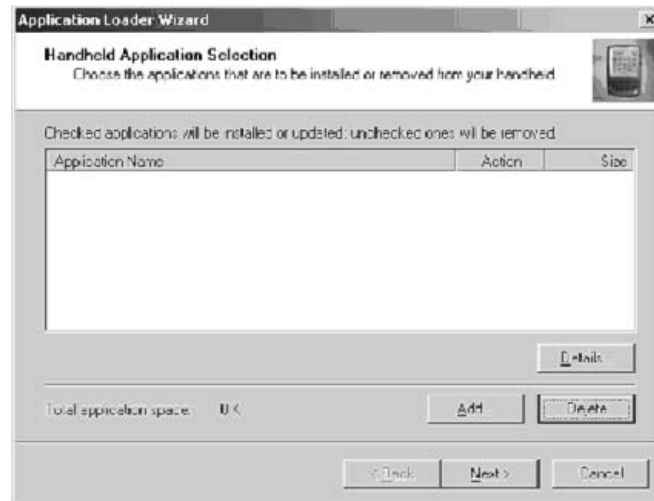
❖ **Installing an offline client**

1   Connect the BlackBerry device to the computer that contains your *Uabbapp.alx* and *Uabbapp.cod* files.

2   Run the BlackBerry Desktop Manager using RIM's documentation.

3   Click Application Loader to start the wizard, then click Next. The Application Loader wizard displays.

4   Click Add, navigate to
    %SYBASE%\UA65\tomcat\webapps\onepage\BlackBerry, and select the
    UAbbapp.alx file.
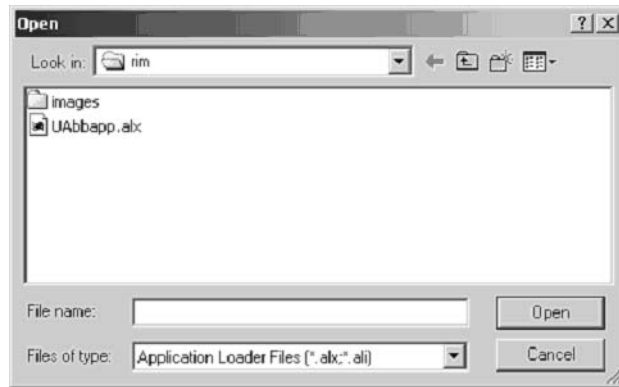
5   Click Open. The application is listed on the Application Loader wizard.

6   Click Next to continue. The application is installed on your BlackBerry
    device.

7   Access the BlackBerry Handheld Simulator window. You see the Unwired
    Accelerator icon.

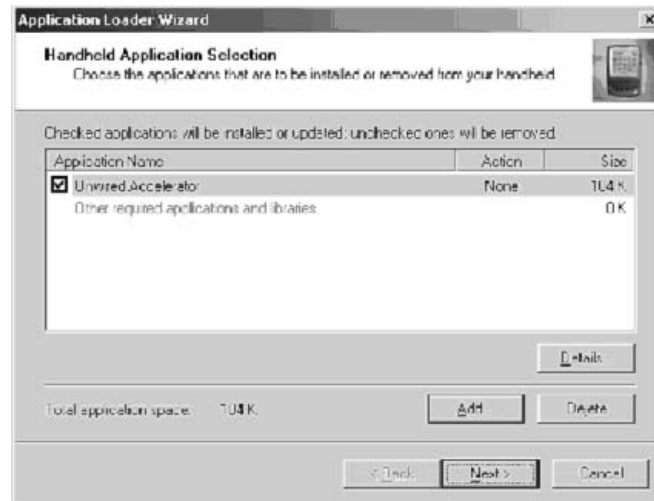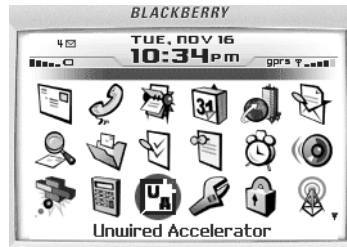8   To run the Unwired Accelerator offline client, use the trackwheel to
    highlight the Unwired Accelerator (UA) icon, and open it. The Unwired
    Accelerator screen displays. The message starting with `Currently`
    `there are no synchronized applications available` displays.

9   Set up a user on the BlackBerry device as described in "Setting up an
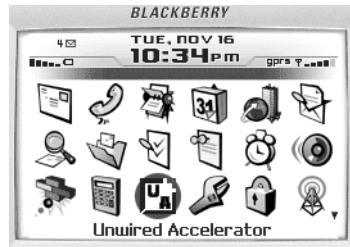   Unwired Accelerator user on the BlackBerry device" on page 26.

Installing offline client on the BlackBerry simulator

This section shows how to install an Unwired Accelerator offline client
application on a BlackBerry simulator. See "Guidelines for installing
BlackBerry server and client software" on page 22 for information about
downloading the simulator from RIM to your desktop.

❖   **Installing an offline client on the simulator**

1   Navigate to *%SYBASE%\UA65\tomcat\webapps\onepage\BlackBerry*.

2   Copy the *UAbbapp.alx* and *UAbbapp.cod* files into your BlackBerry
    simulator installation directory:

    %RIM%\Research In Motion\BlackBerry JDE 3.7\simulator

3   Select Start | Programs | Research In Motion | BlackBerry Java
    Development Environment 3.7 | MDS Simulator to start the BES
    simulator. You can minimize the Java.exe window.

4   Select Start | Programs | Research In Motion | BlackBerry Java
    Development Environment 3.7 | Device Simulator to start the BlackBerry
    device simulator. You can minimize the Device Simulator window.

5   Access your BlackBerry device. You see the Unwired Accelerator (UA) icon.

6   To run the UA offline client, highlight the Unwired Accelerator icon, and open it. The Unwired Accelerator screen displays. The message starting with `Currently there are no synchronized applications available` displays.

7   Set up a user on the BlackBerry simulator as described in "Setting up an Unwired Accelerator user on the BlackBerry device" on page 26.

Setting up an Unwired Accelerator user on the BlackBerry device

This describes how to set up a user on the BlackBerry device or simulator.

❖   **Setting up a user on BlackBerry**

1   Make sure the BlackBerry offline client is running on the device. You should see the Unwired Accelerator icon in the application menu.

2   Access the settings screen by selecting the Settings option on the trackwheel menu.
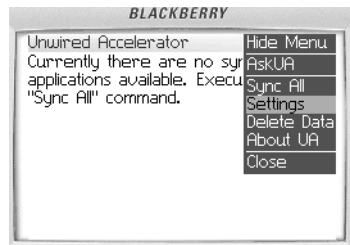
3   On the settings screen, enter your username, password, resource id, server name and domain, and port number. This example uses the `masuper/m8super` account.

4   Select Save from the trackwheel menu, and save the settings.

5   Return to the Unwired Accelerator screen.

Once you use Mobile Web Studio to create mobile applications, and synchronize, you will see the applications on the mobile device. To create mobile applications, see these Unwired Accelerator documents:

•   *Quick Start Guide*

•   *Mobile Application Development Tutorial*

Installing Answers Anywhere server software

This section describes how to configure Answers Anywhere server software for the natural language search feature. Unwired Accelerator is integrated with Answers Anywhere software, which enables users to send simple text-based queries, or natural language requests to Unwired Accelerator and receive text or HTML responses (such as "get employee list for Bob").

The search feature is available through various client interfaces, including e-mail, SMS, mobile device, and Web browser. The Answers Anywhere server software listens for SMS and e-mail messages and processes them.

The Answers Anywhere software uses a preconfigured agent network, which includes general search commands and parameters, to search mobile applications. You cannot customize the agent network, but you can adjust the synonyms for the Execute and Send commands (call.synonym for Execute and send.synonym for Send), and you can create search synonyms for the applications you create through Unwired Accelerator. See the *Unwired Accelerator Feature Guide* and the *Mobile Application Development Tutorial* for information.

Note The agent network is English-only for BlackBerry devices; a simplified Chinese version of the agent network is available for PDAs such PalmOS and PocketPC.

Setting up Answers Anywhere for e-mail

This section describes how to enable users to query Unwired Accelerator applications using an e-mail client.

1 Create a dedicated e-mail account, such as "askua," on your mail system for Unwired Accelerator to check. Your e-mail system must provide pop3 access to this e-mail account.

2 Make a note of the following values:

- Outbound e-mail server (smtp.host) – for example "smtp.pacbell.yahoo.com."

- Inbound e-mail server (pop.host) – for example "lab2k.sybase.com."

- E-mail account name – for example "askua."

- E-mail password – for example, "ua."

- Unwired Accelerator host name – for example, "localhost" or "lab2k."

- Unwired Accelerator port – the default port is "4040."

- Unwired Accelerator rid – the default resource identifier is "21."

3 Navigate to:

%SYBASE%\UA65\tomcat\webapps\dejima\WEB-INF\classes

4 Open the *uadejima.properties* file in a text editor and set the property files for your environment, using information in Table 2-3.

Table 2-3: uadejima.properties file settings

Property name	Description
smtp.host	Outbound e-mail server.
pop.host	Inbound e-mail server.
smtp.auth	true – authenticates outgoing e-mail. If your SMTP host requires authentication for sending e-mails, set this to "true."
	false – this is the default setting. Does not authenticate outgoing e-mail.
email.id	User account for Unwired Accelerator to use on the inbound e-mail server to access the inbound mailbox.
email.pwd	Password for Unwired Accelerator to use to access the inbound mailbox.
ua.host	Host and domain name of the machine where Unwired Accelerator is installed. For example, if the machine name is "lab2k" and the domain is "sybase.com," enter: `lab2k.sybase.com`
ua.port	The port UA is running on. The default is `4040`.
ua.rid	The resource ID used for Answers Anywhere integration. The default is `21`.
default.opal	The location of the Answers Anywhere agent network. The default setting is: `/dbdsUnwired/wired.opal`.
	To use the Simplified Chinese agent network on PDAs, set this value to: `/dbdsUnwired_zh/wired.opal`. See "Setting up Answers Anywhere for Simplified Chinese" on page 30 for additional configuration information.
role.check	Set to "true" to use role verification. Set to "false" if role verification is not needed.

Following is an example file:

```
smtp.host=lab2k.sybase.com
smtp.auth=false
pop.host=lab2k.sybase.com
email.id=ua
email.pwd=ua
ua.host=localhost
ua.port=4040
ua.rid=21
ua.reg.uri=/onepage/mpindex.jsp
default.opal=/dbdsUnwired/wired.opal
role.check=false

application/msword=doc
```

```
application/x-msexcel=xls
application/pdf=pdf
text/html=html
text/plain=txt
image/jpg=jpg
image/giff=gif
```

5 Save the file and close it.

6 Restart the Tomcat application server as described in "Starting and stopping the Tomcat application server" on page 43.

7 Open a Web browser window, enter the following and click Add:

`http://`*hostname.domain*`:`*port*`/dejima/mail.jsp`

Substitute your information, such as:

`http://lab2k.sybase.com:4040/dejima/mail.jsp`

Click Add. This starts the process that handles e-mail queries.

8 To test the configuration, send an e-mail to the dedicated e-mail account, such as "askua." Include the query on the subject line of the e-mail. See the *Unwired Accelerator Feature Guide* and the *Mobile Application Development Tutorial* for information.

Setting up Answers Anywhere for Simplified Chinese

Answers Anywhere supports full query for English, but does not support full query for multi-byte languages, such as Chinese. A Simplified Chinese query agent is available for PDAs such as PalmOS and PocketPC, but not for BlackBerry devices.

Keep in mind the following guidelines for setting up the Simplified Chinese agent:

• In *uadejima.properties*, set the default.opal value to `/dbdsUnwired_zh/wired.opal`, as described in Table 2-3 on page 29.

• Install the language pack on your Windows computer, so you can see the Chinese characters on your English operating system.

• Set the preferred language to Chinese (simplified) on your Internet Explorer browser. This sets the character set to UTF-8.

Setting up Answers Anywhere for SMS

To communicate with your SMS provider, configure CellularModemController (CMC) software. CMC acts as an interface between the SMS service and Unwired Accelerator. The CMC software can be located on the same machine as Unwired Accelerator, or can be moved to a different machine.

To configure CMC, update the *CMCConfig.properties* file, which contains initial values that you can override with command line options. You can run the configuration file with the run command, and you can list the available commands with the run -help command.

The *CMCConfig.properties* file is located in *%SYBASE%\UA65\cmc\classes\com\sybase\cellmodem*. If you want to move the CMC software to another machine, copy the CMCConfig.properties file to the new location.

Note If you set up multiple co-brands (RIDs) in Unwired Accelerator, you must configure a different instance of CMC for each co-brand.

❖ **Configuring the CMC at the command line**

This section describes how to configure the CMC at the command line.

1   Configure CMC by entering commands and the command line in the following format:

   -optionName optionValue

   For example:

   ```
   -baudrate 9600
   ```

   See Table 2-4 for a partial list of commands. Use the run -help command to see a complete list of properties.

Table 2-4: CMCConfig.properties file settings

Option name	Description	Default value
accessLog.File	Name of the file where access log data is kept.	None. If no file is specified, no access log is maintained.
blacklistFile	List of telephone numbers that are excluded from SMS service. When this list is specified and contains values, each message received is checked against the list. If the number is on the list, the message is not processed.	None. The file should have at least one telephone number if used.

Option name	Description	Default value
databaseDriver	Fully qualified class name of a java.sql.Driver implementation for connecting to a database.	com.sybase.jdbc2.jdbc.SybDriver
databasePwd	Password to use when connecting to the database.	SQL
databaseURL	JDBC URL to the database containing tables used by CMC.	None. If this option is not specified, CMC does not attempt to connect to, or use any database.
databaseUser	User name to use when connecting to the database.	dba
httpAuthenticationURL	When roleBasedAccess is true, and a user is trying to register their cell phone, Unwired Accelerator tests the user name and password against this URL.	http://localhost:4040/dejima/protected/protected.jsp
httpURL	This is the HTTP URL that the HTTPClientMessageHandler class sends requests to with the request body message. This is the access point for Answers Anywhere processing. The sms.jsp page looks for an optional RID=$<N>$ query parameter, where $<N>$ is the rid number. For example, http://machine.sybase.com:4040/dejima/sms.jsp?rid=211. If this is not specified, the default RID configured in *uadejima.properties* is used.	http://localhost:4040/dejima.sms.jsp
instanceName	This is the name by which this instance of the CMC process and its modem are known. When you have more than one CMC, you must give each a distinct name, so the configuration data is kept separate and the respective access logs can be distinguished. When CMC is using a database, this name is used in searches and inserts.	DefaultName
logLevel	This determines the minimum severity level of messages that are placed in the logFile. Valid values are described in java.util.logging.Level.	WARNING

Option name	Description	Default value
roleBasedAccess	This is a Boolean property. true – CMC attempts to match a sender's phone number to a registered cell number in the user.cell_phone column of the portal database. If a match is found, the login_name for that user is passed as a parameter to the HTTPUrl for the Web application to use in applying access control. false – role based access is not used.	false
serialPort	The name of the serial port to which the modem is connected.	com1
simPin	If the Subscriber Information Module (SIM) card in the modem requires a PIN to unlock it for use, specify that PIN with this property	none
smscPhone	Usually a SIM card stores its own telephone number for the SMS Service Center it contacts to send SMS messages. To override this telephone number, enter it here.	none
whitelistFile	List of telephone numbers that are allowed to use this SMS service. When this list is specified and contains values, each message received is checked against the list. If the number is not on the list, the message is not processed.	None. The file should have at least one telephone number per line if used.

2   Use the run.bat file, located in *%SYBASE%\UA65\cmc*, to execute the program from a Command Prompt window.

3   Check your configuration to make sure everything is set up correctly using this command from a Command Prompt window:

```
run -logLevel FINEST
```

The FINEST flag ensures you get the most output.

You can also look in the *CMC0.log* file, located in *%SYBASE%\UA65\cmc*, to see if the software is communicating with your cell modem properly.

Common configuration problems include:

•   Not specifying the correct serialPort (if your modem is not hooked up to COM1.

•   Not specifying the correct baudrate that your device supports.

❖ **Configuring CMC from the Admin GUI**

An unsupported administrative graphical interface is also available for configuring CMC.

1   To access the interface, open a Web Browser and supply this URL:

```
http://hostname.domain:port/dejima/admin/home.jsp
```

2   Log in using `masuper/m8super`.

3   Configure the parameters, whitelist, and blacklist for your configuration. See Table 2-4 on page 31 for values.

4   Save your configuration.

❖ **Setting up CMC as a Windows service**

This section describes how to set up CMC as a Windows service, so it runs automatically.

1   Navigate to:

%SYBASE%\UA65\cmc\conf

2   Open the *wrapper.conf* file in a text editor.

3   Change the "wrapper.java.command" property to point to your Java installation. For example, if you installed Unwired Accelerator in *%SYBASE%\UA65*, set the property to:

```
wrapper.java.command=%SYBASE%\UA65\jdk1.4\jre\bin\
java
```

4   Save and close the *wrapper.conf* file.

5   Navigate to:

%SYBASE%\UA65\cmc\bin

6   Execute the InstallCMC script. This creates a Windows service named SMSCellModemController that starts automatically when you reboot Windows.

7   Execute the command `net start SMSCellModemController` to start the service, or use the Services console from Windows Explorer.

❖ **Registering the SMS modem with Unwired Accelerator**

Each user must register the SMS modem number with Unwired Accelerator, by sending an SMS text message that includes user name and password to the SMS modem number. To do so:

1   Obtain the SMS modem number.

2   Send an SMS text message with these three lines to the SMS modem number, substituting your Unwired Accelerator user name and password:

```
Register
<user name>
<password>
```

The user name and password values are entered in the portaldatabase table "users," and the SMS modem number is entered in the "cell_phone_number" column.

If role-based access is used (see Table 2-4 on page 31 for information about the "roleBasedAccess" property), the CMC software checks the request to see whether the phone number for the requesting user is registered. If the number is not registered, the user is prompted to register it.

Configuring Tomcat for LDAP

Tomcat comes preconfigured with Common Security Infrastructure (CSI) and PortalDB provider. To configure Tomcat to use Lightweight Directory Access Protocol (LDAP), see Appendix A, "Setting Up Authentication and Authorization." Currently, a user created in LDAP server must log in to the Portal Interface to activate their profile (see the release bulletin for information about CR #359766).

Uninstalling Unwired Accelerator

If necessary, you can easily uninstall Unwired Accelerator when running in Tomcat.

❖   **Removing Unwired Accelerator**

1   Shut down the Tomcat server and the Adaptive Server Anywhere database.

To shut down Tomcat, open a Command Prompt window, navigate to *%SYBASE%\UA65*, and enter `stoptomcat`, or double-click the file in Windows Explorer.

To shut down Adaptive Server Anywhere, open a Command Prompt window, navigate to *%SYBASE%\UA65*, and enter `stopdatabase`, or double-click the file in Windows Explorer.

2   Delete the *%SYBASE%\UA65* directory.

3   Delete the directory used for log files (for example, *x:\tmp\logs*).

CHAPTER 3   **Getting Started**

This chapter describes how to start using the Portal Interface and Mobile Web Studio.

Topic	Page
Getting started with Portal Interface	37
Getting started with Mobile Web Studio	39
Starting and stopping the system	42

Getting started with Portal Interface

This section provides a quick tutorial for using Portal Interface. In this tutorial, create a basic application using an existing Web application. For detailed information, see the *Portal Interface User's Guide*.

❖ **Logging in to Portal Interface**

1   Open a browser window, and enter:

    http://*hostname.domain*:*port*/onepage/mpindex.jsp

where:

*   *hostname* –is the name of the machine where you installed Unwired Accelerator.

*   *domain* – is the domain name where the installation is located.

*   *port* – is the port number (the default is 4040).

For example, enter:

http://lab2k.sybase.com:4040/onepage/mpindex.jsp

2   Click Join Now.

❖ **Entering your profile information**

1   Enter your first name.

2   Enter your last name.

3   Enter your e-mail address.

4   Enter your telephone number.

5   Choose a member name.

6   Choose a password.

7   Confirm your password.

8   Select the PortalUser role.

9   Read the terms and conditions. If you agree, select the "I agree to the terms
     and conditions" box and click Done.

     You see the Portal Interface default page group. To add pages and portlets,
     you must first add a new page group.

❖   **Creating new page groups**

1   Click Manage Pages.

2   In the Manage Pages window, click Add Page Group.

3   In the Add Page Group window, enter a name for the page group, such as
     `myTest`.

4   For navigation styles, select the PocketPC/PDA and M-Business
     Client/PDA devices from the Available list, then click the right arrow to
     move them to the Assigned list. The navigation style allows you to specify
     how you navigate pages based on your operating system and browser.

     Note   To remove a navigation style from the Assigned list, select the style
     and click the left arrow to move it back to the Available list.

5   Click Done.

     You see the first page of the page group you just created. The first page of
     the new group is automatically assigned the same name as the page group.

     The new page group now appears in the page group as a tab and as a
     selection in the toolbar drop-down list.

❖   **Creating new pages**

1   Select the page group `myTest`, and click Add Page at the top of the
     window.

2   Select "Add new page," and enter `myTest2`. Page names must be unique; if the page name already exists within the current page group, you cannot create the new page.

3   Select the Page Layout 30/70, and click Done.

Your new page name appears in the page tabs, at the far right. You can change the order of the page tabs using the Manage Pages option at the top of the window and editing the page group.

❖   **Creating a portlet**

1   Click Create Portlet.

2   In the Create Portlet wizard URL field, enter:

        www.sybase.com

3   Click Go.

4   In the right pane, click Press (you can use the vertical scroll bar to scroll up and down to find Press).

5   Click Next in the upper-right corner.

6   After the preview refreshes, click the first press release (the first bulleted link) under Press in the middle pane. The cursor flag gives instructions.

7   After the preview refreshes, click the second Add button. The Sybase press release list is added to your page. You can click a link to access the press release.

8   Either log out, or minimize the window. If the browser session expires, you must log in again when prompted.

Getting started with Mobile Web Studio

This section provides a quick tutorial for using the Mobile Web Studio. In this tutorial, create an interactive application using an existing Web application. For detailed information, see the *Unwired Accelerator Feature Guide*, the *Enterprise Portal Developer's Guide*, and the *Mobile Application Development Tutorial*.

Note You must use Internet Explorer 5.5 or 6.0 to access Mobile Web Studio.

❖ **Logging in to Mobile Web Studio**

1 Open a new browser window, and enter:

```
http://hostname.domain:port/onepage/index.html
```

where:

• *hostname* – is the name of the machine where you installed Unwired Accelerator.

• *domain* – is the domain name where the installation is located.

• *port* – is the port number (the default is 4040).

For example, enter:

```
http://lab2k.sybase.com:4040/onepage/index.html
```

2 In the User Name field, enter:

```
masuper
```

3 In the Password field, enter:

```
m8super
```

The Mobile Web Studio window displays. (You can minimize the second window that includes the Close button).

Note If the Mobile Web Studio window does not display, see Table B-1 on page 58 for information.

❖ **Creating an interactive application (stock quote)**

1 Select Applications in the left pane.

2 Select New from the Application Manager Status menu, and click the New button to open Application Builder.

3 Select the down-arrow next to Add, and select Web Element from the drop-down list, or click Add to open the Web Element wizard.

4 In the Location field, enter cbs.marketwatch.com, and click Find or press Enter.

5 If prompted, click the "Direct to cbs.marketwatch.com" link.

6 In the Enter Symbols field in the left pane, enter SY, and click the Quote/News arrow.

7 Click Next in the upper-right corner.

8   After the preview refreshes, click the word "Last" in the quote table. The cursor flag provides instructions.

9   After the preview refreshes, click Select next to the option that displays the entire quote table. You can scroll up and down to view other presentation formats.

Click Next in the upper-right corner.

10   After the preview refreshes, click the Variable box, which is next to the "symb" parameter.

11   In the Display Name field, enter Symbol, and in the Default Value field, enter SY.

Click Next in the upper-right corner.

12   After the preview refreshes, enter Quote in the Element Name field.

Click Next.

13   In the Continuous Capture window, click Finish to close the Application Builder wizard.

14   Test the application by entering IBM in the Symbol field, and clicking Update.

❖   **Saving the application**

1   In Application Builder, click Save in the upper-left corner.

2   In the Finish window, make these changes (accept all other defaults):

Content tab Enter Stock Quote in the Name field, and click In Context.

Administration tab From the Category and Subcategory drop-down lists, select Business and Investing.

3   Click Finish in the upper-right corner.

4   In the confirmation pop-up, click OK.

5   Click Close in the upper-right corner to close the Application Builder.

❖   **Approving the application**

1   Click Applications in the left pane, and click New in the Application Manager Status menu. The new application loads in the detail pane.

2   Right-click the Stock Quote application in the detail pane, and select Approval Status | Approved.

3 In the confirmation pop-up, click OK. The application is now listed under the Approved Status menu.

4 To confirm, click Applications in the left pane, and click Approved in the Application Manager Status menu. The approved Stock Quote application displays in the detail pane.

❖ **Previewing the application**

1 Click Applications in the left pane, and click Approved in the Application Manager Status menu.

2 In the detail pane, click the Stock Quote application and click the Preview button.

3 In the preview window, enter IBM in the Symbol field and click OK. Information for IBM displays.

4 Close the preview window.

5 Either log out, or minimize the browser window. If the browser session expires, you must log in again when prompted.

Starting and stopping the system

This section describes how to start and stop the Adaptive Server Anywhere database and the Tomcat application server.

Start the applications in this order:

1 ASA database

2 Tomcat server

Stop the applications in this order:

1 Tomcat server

2 ASA database

Starting and stopping the database

This section describes how to start and stop the Adaptive Server Anywhere database.

❖ **Starting the ASA database**

1   From a Command Prompt window, navigate to *%SYBASE%\UA65*.

2   Enter startdb, or double-click the file name in Windows Explorer.

This starts the Adaptive Server Anywhere database. When the database starts, the icon for the Sybase ASA database appears in your taskbar.

❖ **Shutting down the ASA database**

1   From a Command Prompt window, navigate to *%SYBASE%\UA65*.

2   Enter stopdatabase, or double-click the file name in Windows Explorer.

Alternatively, make sure Tomcat has been stopped, double-click the Adaptive Server Anywhere icon in the taskbar, then select Shutdown. Close any open browser windows.

Starting and stopping the Tomcat application server

This section describes how to start and stop the Tomcat application server.

❖ **Starting the Tomcat application server**

1   From a Command Prompt window, navigate to *%SYBASE%\UA65*.

2   Enter starttomcat, or double-click the file name in Windows Explorer.

When Tomcat starts, you see a series of messages, including the following:

```
Starting service Tomcat-Standalone
Apache Tomcat/4.1.29
```

When you see this message, minimize the Tomcat window (do not close the window). You can ignore the rest of the messages. If you do not see this message, you can check the *datamanager.log* file, located in *x:\tmp\logs*.

❖ **Shutting down the Tomcat application server**

1   From a Command Prompt window, navigate to *%SYBASE%\UA65*.

2   Enter stoptomcat, or double-click the file name in Windows Explorer.

APPENDIX A   **Setting Up Authentication and Authorization**

This chapter describes how to set up authentication and authorization for Unwired Accelerator 6.5, and either the portal database or a Lightweight Directory Access Protocol (LDAP) server.

Preconfigured for PortalDB   This version of Unwired Accelerator is preconfigured to support authentication and authorization using the PortalDB security provider. If you plan to use Tomcat and PortalDB, you need not perform any of the configuration steps described in this chapter.

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Overview	45
Configuring the CSI realm	46
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Overview

In this version of Unwired Accelerator, a Common Security Infrastructure (CSI) realm works together with a security provider, either PortalDB or LDAP, to support authentication and authorization. The CSI realm is a component that plugs in to a Tomcat 4.1.29 Web application container. To support authentication and authorization, the PortalDB provider uses the Unwired Accelerator database portaldatabase; the LDAP provider uses an LDAP server.

A CSI realm is an abstract interface to security information such as user names, passwords, and role membership. When a user logs in to Unwired Accelerator, the user's name and password are verified against the data server, and if valid, role information is retrieved to provide Tomcat with a list of the user's roles.

To use a combination of components other than Tomcat and the PortalDB security provider:

If your system components are	Perform these steps
Tomcat and the LDAP provider	• Configure the LDAP provider

You can also use both security providers at the same time. If your system is configured to use both the LDAP provider and the PortalDB provider, a user's name and password are first passed to the LDAP provider for authentication, then they are passed to the PortalDB provider. If authentication succeeds with either provider, the user is authenticated. If the user cannot be authenticated with either the LDAP or PortalDB provider, the user is not authenticated. Similarly, when performing authorization role checks, both providers are queried to see whether either of them grants the specified role to the user.

Note For development, you may want to use the preconfigured PortalDB provider, as it can simplify debugging.

Configuring the CSI realm

Unwired Accelerator supports authentication and authorization for the Tomcat Web application container. Version 6.5 of Unwired Accelerator is preconfigured to use Tomcat.

Configure the Tomcat realm

The Tomcat CSI realm plugs in to a Tomcat 4.1.29 Web application container. Its purpose is to delegate authentication and authorization checks to the security provider.

To enable debugging in the Tomcat CSI realm, create a file called *log4j.properties* in *%CATALINA_HOME%\server\classes*, where %CATALINA_HOME% represents the Tomcat root installation directory, and insert the following text:

```
# sample log4j.properties
# SecurityAppender for security packages only
log4j.appender.SecurityAppender=org.apache.log4j.DailyRollingFileAppender
log4j.appender.SecurityAppender.DatePattern='.'yyyy-MM-dd
```

```
log4j.appender.SecurityAppender.File=D:/ep61unwire/UA65/tomcat/logs/
   security_debug.log
log4j.appender.SecurityAppender.layout=org.apache.log4j.PatternLayout
log4j.appender.SecurityAppender.layout.ConversionPattern=%d{ISO8601}
   %-5p %-25c{1} %x - %m%n
log4j.category.com.sybase.security=DEBUG, SecurityAppender

# make sure security messages stay in the security log
log4j.additivity.com.sybase.security=false

# other packages go to the root appender
log4j.appender.RootAppender=org.apache.log4j.ConsoleAppender
log4j.appender.RootAppender.layout=org.apache.log4j.PatternLayout
log4j.appender.RootAppender.layout.ConversionPattern=%d{ISO8601}
   %-5p %-25c{1} %x - %m%n
log4j.rootCategory=INFO, RootAppender
```

The debugging output is written to the file whose name and location are specified by the log4j.appender.SecurityAppender.File property; in the example above, *D:\ep61unwire\UA65\tomcat\logs\security_debug.log*.

Initially, the Tomcat CSI realm is configured to use the PortalDB provider. To use the LDAP provider, see "Configure the LDAP provider" on page 47.

Configuring the security provider

Unwired Accelerator includes two security providers, the PortalDB provider and the LDAP provider. Initially, Unwired Accelerator is configured to use the PortalDB provider. You can use the LDAP provider instead of the PortalDB provider, or you can use both providers concurrently. To configure a security provider, see:

- "Configure the LDAP provider" below, or
- "Restore the PortalDB provider configuration" on page 54.

Configure the LDAP provider

Unwired Accelerator LDAP support includes authentication, attribution, and authorization services. The LDAP provider authenticates users when they log in using credentials that can be validated on the LDAP server.

1   To use both the LDAP provider and the PortalDB provider, go to step 2.

To use only the LDAP provider:

a   Change to the location of the *global.properties.xml* file:

- Tomcat – *%SYBASE%\UA65\tomcat\webapps\onepage\config*, where SYBASE is the installation directory of your Sybase software.

b   Using a text editor, open *global.propeties.xml*, and change the value of the AuthenticationUsing property to "CSI".

2   Change to the location of the *csi.xml* file:

- Tomcat – *%CATALINA_HOME%\conf*, where %CATALINA_HOME% represents the Tomcat root installation directory.

3   Using a text editor, open *csi.xml*, and edit the values appropriate for your system.

The sample *csi.xml* file that is installed with Unwired Accelerator contains the following LDAP provider definitions, which are commented out. Remove the comment delimiters:

```
<!--

<config:authenticationProvider
   name="com.sybase.security.ldap.LDAPLoginModule"
   controlFlag="optional">

   <config:options name="ServerType" value="sunone5" />
   <config:options name="ProviderURL" value="ldap://localhost:389" />
   <config:options name="DefaultSearchBase" value="dc=sybase,dc=com" />
</config:authenticationProvider>

-->

<!-- LDAP attributer - commented out
   <config:provider name="com.sybase.security.ldap.LDAPAttributer"
     type="attributer" />
-->
```

4   Comment out the following PortalDBAttributer definition. To comment out the definition, insert "<!--" at the beginning of the definition, and "-->" at the end of the definition.

```
<config:provider name="com.sybase.security.portaldb.PortalDBAttributer"
   type="attributer" />
```

Table A-1 defines the complete list of options that you can use to configure the authentication provider. You can enable any of the options by adding the option name and value to *csi.xml,* using the same syntax as illustrated in step 3. You must add new option definitions within the authenticationProvider definition; that is, between the following two lines:

```
<config:authenticationProvider
   name="com.sybase.security.ldap.LDAPLoginModule">
...
</config:authenticationProvider>
```

Table A-1: LDAP configuration options

Configuration option	Default value	Definition
AuthenticationFilter	Most LDAP servers: (&(uid={uid}) (objectclass=personal) Microsoft ActiveDirectory: (&(userPrincipalName={uid}) (objectclass=user))	The filter to use when authenticating users. When performing a user name/password-based authentication, this filter is used to determine the LDAP entry that matches the supplied user name. The string "{uid}" in the filter is replaced with the user name.
AuthenticationMethod	simple	The authentication method to use for all LDAP authentication requests. The supported methods are: • "simple" – clear text authentication. • "DIGEST-MD5" – more secure, hashed password authentication. Passwords must be stored in plain text on your LDAP server, and you must use JRE 1.4 or higher.
AuthenticationScope	onelevel	Can be set to either "onelevel" or "subtree." If set to "onelevel," only the AuthenticationSearchBase is searched used to search for user records; if set to "subtree," the AuthenticationSearchBase and its subtree are searched.
AuthenticationSearchBase		The location of user records. If not specified, the DefaultSearchBase is used.
BindDN		The DN to bind to when creating the initial LDAP connection. This DN must identify a user who has read capability on all records that are accessed when users authenticate using the login module. This property also defines the credentials that are used to perform anonymous attribution operations when LDAP authentication has not occurred. If this property is not specified, anonymous binding is used, which works on most servers.

Configuration option	Default value	Definition
BindPassword		The password to bind to when creating the initial LDAP connection. You must specify this only when the BindDN property is specified.
DefaultSearchBase		The search base that is used if no other LDAP search base is specified for authentication, roles, or attribution. Use either of the following two syntax options, and verify that the syntax you choose matches what is configured on the LDAP server: dc=*<domain_name>*,dc=*<top_level_domain>* o=*<company_name>*,c=*<country_code>* For a machine in the Sybase organization, the previous two syntax options map to: dc=sybase,dc=com o=Sybase,c=us
InitialContextFactory	com.sun.jndi.ldap.LdapCtxFactory	Specifies the JNDI provider to use. If you are using a Sun Java VM version 1.3 or higher, the default value should work. If you are using an IBM or other third-party VM, adjust this value accordingly.
ProviderURL	ldap://localhost:389	The URL to connect to the LDAP server. The default value should work if the LDAP server is located on the same machine as the portal and listens on port 389.
RoleFilter	SunONE: (&(objectclass=ldapsubentry)(objectclass=nsroledefinition)) Netscape Directory Server: (|(objectclass=groupofnames)(objectclass=groupofuniquenames)) Microsoft ActiveDirectory: (|(objectclass=groupofnames)(objectclass=group))	The role filter, which when used with the RoleSearchBase and RoleScope, returns the complete list of roles from the LDAP server.
RoleMemberAttributes	Netscape Directory Server: member,uniquemember	A comma-delimited list of one or more role attributes that define the DNs for users who have the role. The DNs are used to determine which roles the user has. This property may be helpful if you use LDAP groups as placeholders for roles. **Note** The default value applies only to Netscape Directory Server; no default exists for other servers.

Configuration option	Default value	Definition
RoleNameAttribute	cn	The attribute that identifies the common names of roles. If a role name value is "dn," the role name is assumed to be the full DN of the role.
RoleScope	onelevel	Can be set to either "onelevel" or "subtree." If set to "onelevel," only the RoleSearchBase is used to search for roles; if set to "subtree," the RoleSearchBase and its subtree are searched.
RoleSearchBase		The search base used to retrieve a list of roles. If not specified, the DefaultSearchBase is used.
ServerType		The type of LDAP server you are connecting to; supported server types are:
		• "msad2k" – Microsoft ActiveDirectory. Windows 2000—see "Caveats when using Microsoft ActiveDirectory LDAP servers" on page 53.
		• "nsds4" – Netscape Directory Server 4.
		• "sunone5" – SunONE Directory Server 5.
		This value is not required, but if provided, establishes default values for the following configuration properties:
		• AuthenticationFilter
		• RoleFilter
		• RoleMembershipAttributes
		• UserRoleMembershipAttributes
UserFreeformRole MembershipAttributes		The "free-form" role membership attribute list. Users who have attributes in this comma-delimited list are automatically granted access to roles whose names match the attribute value. For example, if the value of this property is "department" and the user's LDAP record has the values "sales" and "consulting" for the department attribute, then the user is granted roles whose names are "sales" and "consulting."
		If you are using a SunONE Directory Server 5:
		1 From the LDAP Administration console's Generic Editor, add a multivalue attribute called "department" for the user.
		2 Highlight "department," click Add Value, and enter "sales."
		3 Click Add Value again, and enter "consulting."

Configuration option	Default value	Definition
UserRoleMembership Attributes	SunONE: nsRoleDN Microsoft ActiveDirectory: memberOf	Defines a user attribute to store the list of role DNs for all the roles a user has been granted. These role DNs are cross-referenced against the roles retrieved using the RoleSearchBase and RoleFilter to get a complete list of a user's roles.
		Note For servers other than SunONE and Microsoft ActiveDirectory, there is no default value.

Role computation

Role computation techniques are used to list roles for both authenticated and unauthenticated users. The LDAP provider performs access control using roles, and supports three types of role constructs; each may be used independently, or all three may be used at the same time:

- User-level role attributes – this is the most efficient role definition format, and is supported by SunONE and ActiveDirectory. Using this technique, a user's roles are enumerated by a read-only attribute in the user's LDAP record, which is managed by a directory server. The advantages of this technique are the efficiency with which role memberships can be queried, and the ease with which they can be managed using the native LDAP server's management tools. To use this option, configure the following LDAP properties, which are described in Table A-1 on page 49:

  - RoleFilter

  - RoleNameAttribute

  - RoleSearchBase

  - RoleScope

  - UserRoleMembershipAttributes

- LDAP group role definitions – supported by almost all LDAP servers and a common construct in older LDAP servers. This technique may be useful if you want to use the same LDAP schema across multiple LDAP server types. Unlike the user-level role attributes, LDAP group memberships are stored and checked on a group-by-group basis. Each defined group has an attribute that lists all the members in the group. Groups are typically in one of two object classes, either groupofnames or groupofuniquenames.

  To use this option, configure the following properties in the *csi.xml* file:

- RoleFilter

- RoleMemberAttributes

- RoleNameAttribute

- RoleScope

- RoleSearchBase

See Table A-1 on page 49 for more information. The value of RoleMemberAttributes is a comma-delimited list of attributes, each of which defines members of the group. An example value for this property is "uniquemember,member," which represents the membership attributes in the groupofnames and groupofuniquenames object classes.

- Free-form role definitions – unique in that the role itself does not have an entry in the LDAP data store. To create a free-form role definition, begin by defining one or more user-level attributes. When roles are calculated for a user, the collective values of the attributes—which can have multiple values—are added as roles of which the user is a member. This technique requires less administrative overhead than either of the two previously described techniques.

  As an example, assign a free-form role definition that is equivalent to the department number of a user. A role check performed on a specific department number is satisfied only by users who have the appropriate department number attribute value. To use free-form role definitions, configure the UserFreeformRoleMembershipAttributes property—see Table A-1 on page 49.

Caveats when using Microsoft ActiveDirectory LDAP servers

If you are using the Microsoft ActiveDirectory Windows 2000 server, the following restrictions apply:

- The DIGEST-MD5 authentication mode is not supported.

- The value of DefaultSearchBase must match exactly the value set for the directory server, including case.

- If you set the value of DefaultSearchBase to "DC=epstg,DC=com," you must set the values of both AuthenticationSearchBase and RoleSearchBase to "CN=Users,DC=epstg,DC=com."

- Anonymous binding is not permitted. You must specify a BindDN/BindPassword that identifies a user who can view all other users and groups; for example, specify "mtester@epstg.com" as the BindDN and "secure123" as the BindPassword.

- From the ActiveDirectory Users and Computers console, you must create users and groups, then add users to the groups so they are authorized to perform tasks in Unwired Accelerator. Create the following groups, then add users to these groups:

  - everybody

  - PortalAdmin

  - PortalGuest

  - PortalUser

  - StudioAdmin

  - superuser

Restore the PortalDB provider configuration

Initially, Unwired Accelerator is configured to use the PortalDB security provider. If your system was changed to use the LDAP security provider, you can restore the PortalDB configuration using the following procedure.

1 Change to the location of the *global.properties.xml* file:

  - Tomcat – *%SYBASE%\UA65\tomcat\webapps\onepage\config*, where SYBASE is the root installation directory of your Sybase software.

2 Using a text editor, open *global.propeties.xml*, and set the value of the AuthenticationUsing property to "Database".

3 Change to the location of the *csi.xml* file:

  - Tomcat – *%CATALINA_HOME%\conf*, where %CATALINA_HOME% represents the Tomcat root installation directory.

4 Open *csi.xml*, and verify that the PortalDB provider definitions are not commented out. The sample *csi.xml* file that is installed with Unwired Accelerator contains the following PortalDB provider definitions:

```
<config:authenticationProvider
```

```
   name="com.sybase.security.portaldb.PortalDBLoginModule"
   controlFlag="optional">

   <config:options name="DatasourceName"
      value="java:comp/env/jdbc/portaldb" />

</config:authenticationProvider>

<config:provider name="com.sybase.security.portaldb.PortalDBAttributer"
   type="attributer" />
```

> The value of DatasourceName defines the name that is passed to the javax.naming.InitialContext().lookup(*datasourceName*) method to retrieve a connection to the portaldatabase. The default value is "java:comp/env/jdbc/portaldb," and Unwired Accelerator creates this JNDI name automatically during deployment. If the DatasourceName configuration option is missing, the default value is used.

> 5   To use the PortalDB provider only, comment out the LDAP provider definition in *csi.xml*. To comment out the definition, insert "<!--" at the beginning of the definition, and "-->" at the end of the definition. In the following example, the LDAP provider definition is commented out:

```
<!--
<authenticationProvider
name="com.sybase.security.ldap.LDAPLoginModule">
   <options name="ServerType" value="sunone5"/>
   <options name="DefaultSearchBase" value=""/>
   <options name="ProviderURL" value="ldap://localhost:389"/>
   <options name="AuthenticationMethod" value="simple"/>
   <options name="AuthenticationScope" value="subtree"/>
   <options name="AuthenticationSearchBase" value=""/>
   <options name="RoleScope" value="subtree"/>
   <options name="RoleSearchBase" value=""/>
</authenticationProvider>
-->
```

> To use both the PortalDB provider and the LDAP provider, verify that neither of the provider definitions is commented out.

APPENDIX B   **Troubleshooting**

This chapter describes how to troubleshoot Unwired Accelerator installation and configuration problems.

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Overview	57
Troubleshooting the Unwired Accelerator setup	57
Troubleshooting the M-Business Anywhere setup	59
Troubleshooting the mobile device setup	59

Overview

Use the following resources to help troubleshoot installation and configuration problems:

- Viewing log files

- Viewing error messages

- Checking port numbers

- Checking configuration files

- Testing connections

- Running the Portal Interface and Mobile Web Studio

- Running the M-Business Anywhere server and client

- Running mobile device applications

Troubleshooting the Unwired Accelerator setup

Table B-1 identifies common Unwired Accelerator configuration problems and provides useful troubleshooting information.

Table B-1: Troubleshooting Unwired Accelerator problems

Problem	Try this
Cannot start ASA database: `Connection error: Unable to initialize requested communication links`	If you receive this error when trying to start the ASA database using `startdb`, check the *global.properties.xml* and *server.xml* files to make sure you changed the ASA port number to the correct value. The default is 4747.
Cannot start the Portal Interface: File Not Found 404 error	If you receive this error when trying to start Portal Interface, make sure you: • Ran *config* to change *localhost* to your machine name (such as `lab2k`) and to set other values as described in "Installation tasks" on page 5. • Changed the machine name and domain name for your network as described in "Installation tasks" on page 5. • Entered the URL correctly to access Portal Interface as described in "Verifying the installation" on page 9. • Are using the correct port number; for example, 4040 when running in Tomcat.
Cannot start Mobile Web Studio	If you cannot start Mobile Web Studio, verify that you are using: • Internet Explorer and not Netscape. • The correct version of Internet Explorer as described in Table 2-1 on page 4. • The correct port number, for example, 4040 when running in Tomcat.

Mobile Web Studio window does not display	If the Mobile Web Studio window does not display, but the browser window with the Close button does display, after entering the following in the Web browser:
	
	`http://`*hostname.domain*`:`*port*`/onepage/index.html`
	
	you may have pop-ups disabled in the Web browser. The Mobile Web Studio application requires pop-ups.
	
	You can either:
	
	• Enable pop-ups in your Web browser.
	• Alternatively, if you do not wish to enable pop-ups, you can access Mobile Web Studio by entering the following in the Web browser:
	
	`http://`*hostname.domain*`:`*port*`/onepage/loader.jsp`

Troubleshooting the M-Business Anywhere setup

Table B-2 identifies common M-Business Anywhere configuration problems and provides useful troubleshooting information.

Table B-2: Troubleshooting Unwired Accelerator problems

Problem	Try this
M-Business Anywhere and Unwired Accelerator are not communicating	If you installed M-Business Anywhere server on a different Windows server than Unwired Accelerator, verify that you modified these files correctly: • *gridlayout1.jsp* • *server.xml* See "Configuring M-Business Anywhere" on page 16 for correct settings.
Cannot use the Manage M-Business option from Mobile Web Studio	This most likely stems from a configuration problem. Check the following: • Check the *server.xml* file to make sure the jdbc/agdb JNDI Datasource is configured properly for the container as described in "Configuring server.xml" on page 19.

Troubleshooting the mobile device setup

Table B-3 identifies common mobile configuration problems and provides useful troubleshooting information.

Table B-3: Troubleshooting Unwired Accelerator problems

Problem	Try this
Cannot create a personal channel	Check the *global.properties.xml* file to make sure the alwaysValidateSession parameter is set to "false." See "Configuring global.properties.xml" on page 17.
Cannot access mobile application: `Your submission has been recorded and will be sent during the next Synchronization`	If you see this message when trying to access an application on a mobile device, check the alwaysValidateSession parameter in the *global.properties.xml* file. The parameter is probably set to "true," but should be set to "false" to enable personal channels to work. See "Configuring global.properties.xml" on page 17.
Cannot use mobile application: `avantgo.db is not installed, please install the db pod`	This message indicates the M-Business Anywhere client requires one or more database PODs to authenticate mobile applications. See "Configuring gridlayout.jsp" on page 16.

Problem	Try this
Mobile application does not appear on the mobile device	Verify that: • The mobile application is deployed to the group. In Mobile Web Studio, select Manage | M-Business | Groups, and check the groups. • The M-Business Anywhere user name/password and server properties are set correctly in M-Business Client. M-Business Clients use M-Business users, not Mobile Web Studio users. See "Connecting clients with the M-Business Anywhere server" on page 15. • The user belongs to the group that contains the mobile application.

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