SYBASE®
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Tutorial: Mobile Workflow Package Development

Sybase Unwired Platform 2.0 ESD #1

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Sybase Unwired Platform Tutorials

The Sybase® Unwired Platform tutorials demonstrate how to develop, deploy, and test mobile business objects, device applications, and mobile workflow packages. You can also use the tutorials to demonstrate system functionality and train users.

- Learn mobile business object (MBO) basics, and create a mobile device application:
  - *Tutorial: Mobile Business Object Development*
- Create native mobile device applications:
  - *Tutorial: BlackBerry Application Development*
  - *Tutorial: iOS Application Development*
- Create a mobile workflow package:
  - *Tutorial: Mobile Workflow Package Development*

The tutorials demonstrate a cross section of basic functionality, which includes creating MBOs that can be used in replication-based or message-based synchronization; and using various Sybase Unwired WorkSpace development tools, independent development environments, and device types.

Table 1. Tutorial summary

Tutorials	Mobile business objects (MBOs)	Synchronization types	Development tools	Device types
Tutorial: Mobile Business Object Development	Create new MBOs	Replication-based	Sybase Unwired WorkSpace	N/A
Tutorial: BlackBerry Application Development	Create new MBOs	Replication-based	Sybase Unwired WorkSpace	BlackBerry
Tutorial: iOS Application Development	Create new MBOs	Message-based	Sybase Unwired WorkSpace	iPhone
Tutorial: Mobile Workflow Package Development	Create new MBOs	Message-based	Mobile Workflow Forms Editor	Windows Mobile iPhone

Task Flow

Use this tutorial to develop a mobile workflow package using message-based synchronization. You can deploy and run the mobile workflow package on a Windows Mobile emulator, or an iPhone simulator.

Task	Goals	Procedures required to achieve the goals
Getting Started	Install Sybase Unwired Platform, create a connection profile, start the server and Unwired WorkSpace, and create a Mobile Workflow Application project.	• *Getting Started* on page 5 • *Installing Sybase Unwired Platform* on page 5 • *Installing Microsoft Synchronization Software* on page 5 • *Starting Unwired Platform Services* on page 6 • *Starting Sybase Unwired WorkSpace* on page 7 • *Connecting to Sybase Control Center* on page 7 • *Registering the Device in Sybase Control Center* on page 8 • (Optional) *Learning the Basics* on page 9 • *Creating the sampledb Connection Profile* on page 11 • *Creating the Mobile Workflow 101 Mobile Application Project* on page 14
Developing a Database Mobile Business Object	Create and deploy a database mobile object.	• *Creating the TravelRequest Database Table* on page 15 • *Creating the TravelRequest Mobile Business Object* on page 17 • *Deploying the WorkFlow101 Mobile Application Project* on page 17

Task	Goals	Procedures required to achieve the goals
Developing a Mobile Workflow Application	Create a mobile workflow form, generate the files, assign the mobile workflow package to a user, and view the mobile workflow form on the emulator or simulator.	• *Creating a Mobile Workflow Form* on page 21 • *Installing the Mobile Workflow Package* on page 27 • *Viewing and Running the Mobile Workflow Package* on page 37 • *Verifying the Data on the Backend Database* on page 43

Getting Started

Goal: Install and learn about Sybase Unwired Platform and its components.

These tasks are required, unless otherwise noted, for all tutorials, but you need to perform them only once.

1. *Installing Sybase Unwired Platform* on page 5
2. *Starting Unwired Server* on page 6
3. *Connecting to Sybase Control Center* on page 7
4. *Starting Sybase Unwired WorkSpace* on page 7
5. (Optional) *Learning the Basics* on page 9
6. *Creating the sampledb Connection Profile* on page 11

Installing Sybase Unwired Platform

Goal: Install Sybase Unwired Platform.

Install these Sybase Unwired Platform components:

- Data Tier
- Unwired Server
- Unwired WorkSpace

If Unwired Platform is already installed and any of these components are missing:

1. Start the Sybase Unwired Platform installer.
2. Follow the instructions in the installation wizard. When prompted, select **Custom Install**.
3. Select the required components, and complete the installation.

For complete installation instructions, see the *Sybase Unwired Platform Installation Guide* and *Release Bulletin* at *http://sybooks.sybase.com/nav/base.do*.

Installing Microsoft Synchronization Software

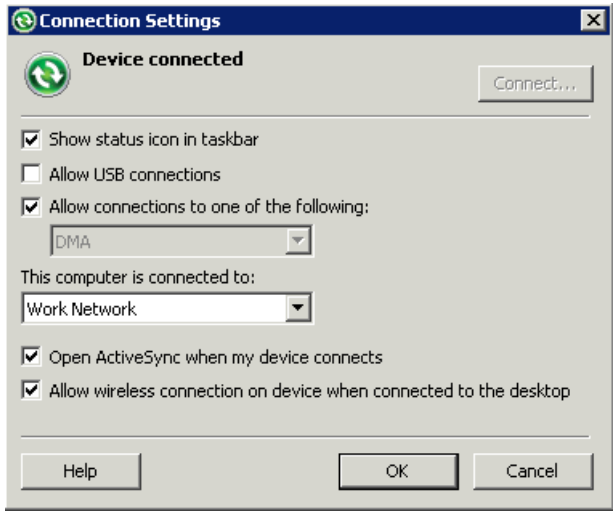
Install and configure Microsoft synchronization software so you can deploy and run a mobile application on a Windows Mobile emulator.

Note: Microsoft ActiveSync is for Windows XP. If you are using Windows Vista, Windows 7, or Windows 2008, install Virtual PC 2007 SP1 and Windows Mobile Device Center to manage synchronization settings. Download the Windows Mobile Device Center from *http://*

www.microsoft.com/windowsmobile/en-us/downloads/microsoft/device-center-download.mspx.

1. Download Microsoft ActiveSync from *http://www.microsoft.com/windowsmobile/en-us/help/synchronize/device-synch.mspx*. Save it to your local machine. Windows XP requires ActiveSync version 4.5.
2. In Windows Explorer, double-click **setup.msi**.
3. When installation is complete, restart your machine.

   ActiveSync starts automatically, and its icon appears in the Windows toolbar.
4. Double-click the **ActiveSync** icon.
5. Select **File > Connection Settings**.
6. Select **Allow Connections to One of the Following**, then select **DMA**.
7. Under This Computer is Connected to, select **Work Network**.



8. Click **OK**.

Starting Unwired Platform Services

Goal: Start Unwired Server and the sample database.

Select **Start > Programs > Sybase > Unwired Platform > Start Unwired Platform Services**.

Starting Sybase Unwired WorkSpace

Goal: Start Unwired WorkSpace.

1. Select **Start > Programs > Sybase > Unwired Platform > Unwired WorkSpace**.

   The Welcome page displays links to product information, and to the product.
2. To read more about Sybase Unwired WorkSpace concepts and tasks, select **Help > Help Contents** from the main menu.

Connecting to Sybase Control Center

Goal: Open the Web-based Sybase Control Center administration console to manage Unwired Server and its components.

From Sybase Control Center, you can:

- View servers and their status
- Start and stop a server
- View server logs
- Deploy a mobile application package
- Register devices
- Set role mappings

For information on configuring, managing, and monitoring Unwired Server, select **Help > Online Documentation**.

1. Select **Start > Programs > Sybase > Sybase Control Center**.

   Note: If Sybase Control Center does not launch, make sure that the Sybase Unified Agent service is started. See the Installation Guide for details.
2. Log in using the default login:
   - User name – `supAdmin`
   - Password – `s3pAdmin`

   Logging in to Sybase Control Center allows you access to Unwired Platform administration features that you are authorized to use.

Registering the Device in Sybase Control Center

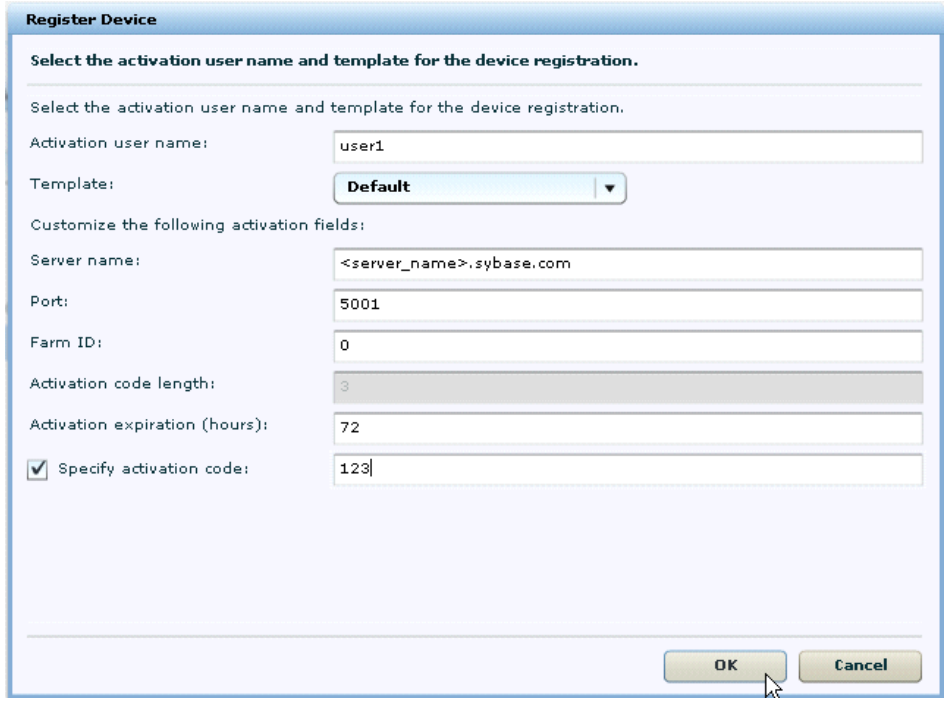
Use Sybase Control Center to register the device.

Prerequisites

You must be logged in to Sybase Control Center.

Task

1. Log in to Sybase Control Center using the supAdmin/s3pAdmin user name and password.
2. In Sybase Control Center, select **View > Select > Unwired Server Cluster Management View**.
3. Expand the **Servers** folder in the left pane, and select **Device Users**.
4. In the right pane, click **Devices**.
5. Click **Register**.
6. In the Register Device window, enter the required information:
   - Activation user name – enter a user name, such as user1.
   - Server name – the DNS name or IP address of the primary Unwired Server, such as "myserver.mycompany.com". If using Relay Server, the server name is the IP address or fully qualified name of the Relay Server host.
   - Port – the port used for messaging connections between the device and Unwired Server. If using Relay Server, this is the Relay Server port. Default: 5001
   - Farm ID – a string associated with the Relay Server farm ID. Can contain only letters A – Z (uppercase or lowercase), numbers 0 – 9, or a combination of both. Default: 0
   - Activation code length – the number of characters in the activation code. If you are reregistering or cloning a device, this value cannot be changed.
   - Activation expiration (hours) – the number of hours the activation code is valid.
   - (Optional) Select the check box adjacent to **Specify activation Code** to enter the code sent to the user in the activation e-mail. This value can contain letters A – Z (uppercase or lowercase), numbers 0 – 9, or a combination of both. Acceptable range: 1 to 10 characters.



Note: <server_name> should be the actual name of your machine.

Learning the Basics

Goal: Learn about Sybase Unwired WorkSpace and how to access help.

Prerequisites

Start Unwired WorkSpace.

Task

1. From the Welcome page, select any of the links to familiarize yourself with the Unwired WorkSpace environment.

   To close this page, click the **X**. You can reopen this page by selecting **Help** > **Welcome**.
2. Select **Start Development** to access the Sybase Unwired WorkSpace development environment.

   Look at the area (window or view) that you will be working in to access, create, define, and update mobile business objects (MBOs).

View	Description
WorkSpace Navigator	This view displays mobile application project folders, each of which contains all project-related resources in subfolders, including MBOs, data source references to which the MBOs are bound, personalization keys, and so on. Use this view to review and modify MBO-related properties.
Enterprise Explorer	A window that provides functionality to connect to various enterprise back-end systems; for example, database servers, SAP® servers, and Sybase Unwired Server.
Mobile Application Diagram	A graphical editor where you create and define mobile business objects. Use the Mobile Application Diagram to create MBOs (including attributes and operations), then define relationships with other MBOs. You can: • Create MBOs in the Mobile Application Diagram using Palette icons and menu selections – either bind or defer binding to a data source, when creating an MBO. For example, you may want to model your MBOs before creating the data sources to which they bind. This is sometimes called the top-down approach. • Drag items from Enterprise Explorer and drop them onto the Mobile Application Diagram to create the MBO – quickly creates the operations and attributes automatically based on the data source being dropped on the Mobile Application Diagram. This is sometimes called the bottom-up approach. Each new mobile application project generates an associated Mobile Application Diagram.
Palette	Access the Palette from the Mobile Application Diagram. It provides controls, such as the ability to create MBOs, add attributes and operations, and define relationships, by dragging and dropping the corresponding icon onto the Mobile Application Diagram or existing MBO.

View	Description
Properties view	Select an object in the Mobile Application Diagram to display and edit its properties in the Properties view. You cannot create an MBO from the Properties view, but generally, most development and configuration is performed here.
Outline view	Displays an outline of the file that is currently open in the editor area, and lists structural elements. The contents are editor-specific.
Problem view	Displays problems, errors, or warnings that you may encounter.

3. To access the online help, select **Help > Help Contents** from the main menu bar.
4. Expand any of the documents that appear in the left pane.

   Some documents are for Sybase Unwired Platform, while others are for the Eclipse development environment.

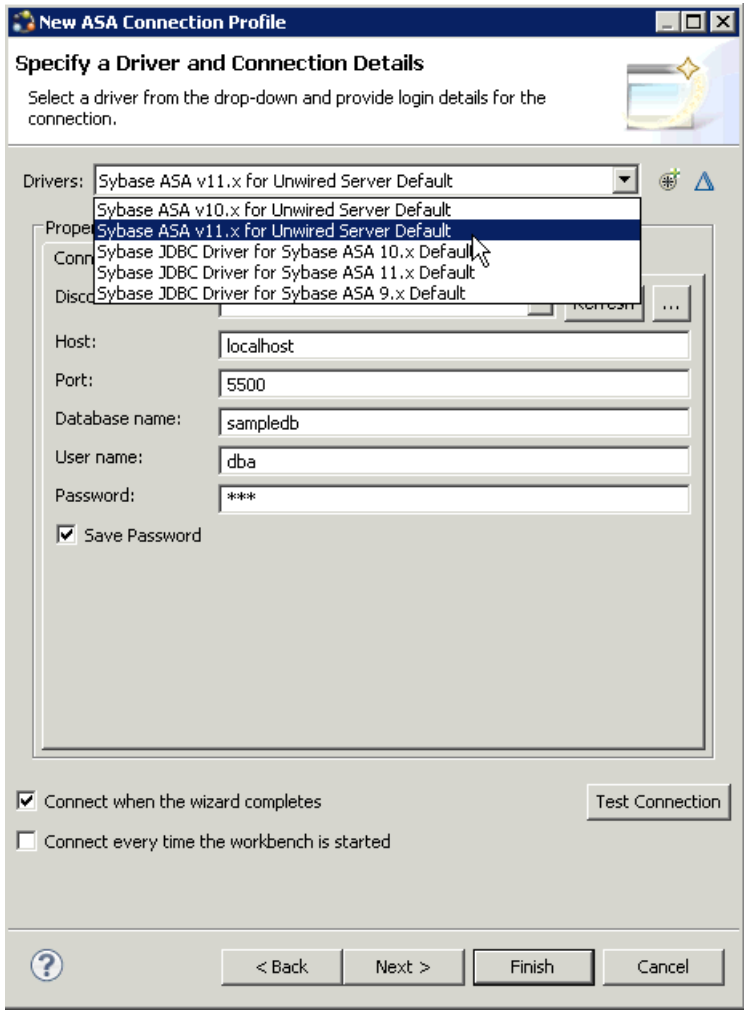
Creating the sampledb Connection Profile

Goal: Create a database connection profile and test the sample database connection.

Installing Sybase Unwired Platform also installs a sample database `sampledb`, which you can use to create and test mobile business objects (MBOs). Starting Sybase Unwired Platform Services automatically starts the database, depending on your license type. A default connection profile (My Sample Database) is included with the installation, and provides access to the `sampledb` database. This tutorial shows you how to create and use a new connection profile named `sampledb`.

This task is required for all tutorials, but you need to perform it only once. If the sampledb connection profile already exists, you do need not perform this task.

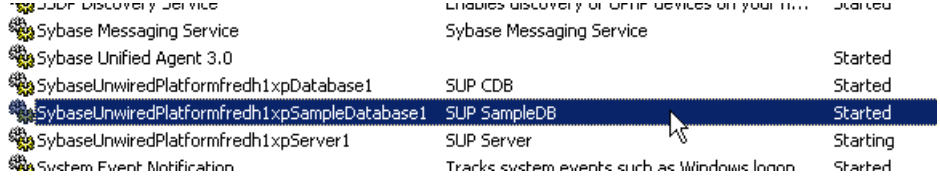
1. From the Enterprise Explorer, right-click the **Database Connections** folder and select **New** to open the Wizard Selection Page.
2. Select **Sybase ASA**, enter `sampledb` as the name, and click **Next**.
3. Select **Sybase ASA v11.x for Unwired Server Default** as the driver and keep the default settings, including `dba` as the **User name** and `SQL` as the **Password**. Select **Save Password**.



4. Click **Test Connection**.

   If Test Connection fails, verify Unwired Platform Services, including the sampledb database, are running.

   a) Select the Windows **Start > Settings > Control Panel** menu.
   b) Select **Administrative Tools**, then select **Services**.
   c) Depending on your installation options (for example, license type, whether or not you installed a cluster, and so on) determines which Sybase services are running.



Note: If the sampledb database is not running, you can install and start it from the command line. To install it, use the command **sampledb install auto/manual**. For example:

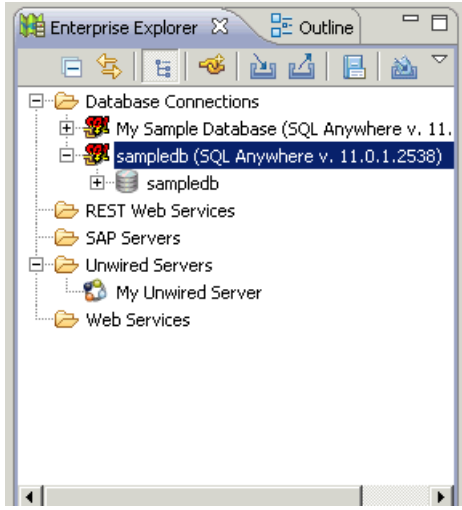
```
C:\Sybase\UnwiredPlatform\Servers\UnwiredServer\bin> sampledb
install auto
```

To start it from the command line, run the command **sampledb start**. For example:

```
C:\Sybase\UnwiredPlatform\Servers\UnwiredServer\bin> sampledb
start
```

5. In the Ping Succeeded message, click **OK**.
6. Click **Finish**.

View the sampledb connection profile from Enterprise Explorer by expanding the **Database Connections** folder.



Creating the Mobile Workflow 101 Mobile Application Project

A mobile application project is the container for the mobile business objects that form the business logic of mobile applications.

Before you can create mobile business objects, you must create a mobile application project.

1. From the main menu bar, select **File > New > Mobile Application Project**.
2. Enter `MobileWorkflow101` as the name.
3. Click **Finish**.

Developing a Database Mobile Business Object

Goal: Create a database mobile business object and deploy it to Unwired Server.

Develop the database mobile business object by:

1. *Creating the TravelRequest Database Table* on page 15.
2. *Creating the TravelRequest Mobile Business Object* on page 17.
3. *Deploying the WorkFlow101 Mobile Application Project* on page 17.

Creating the TravelRequest Database Table

Goal: Create the database table that will be used to create a Travel Request mobile business object.

Prerequisites

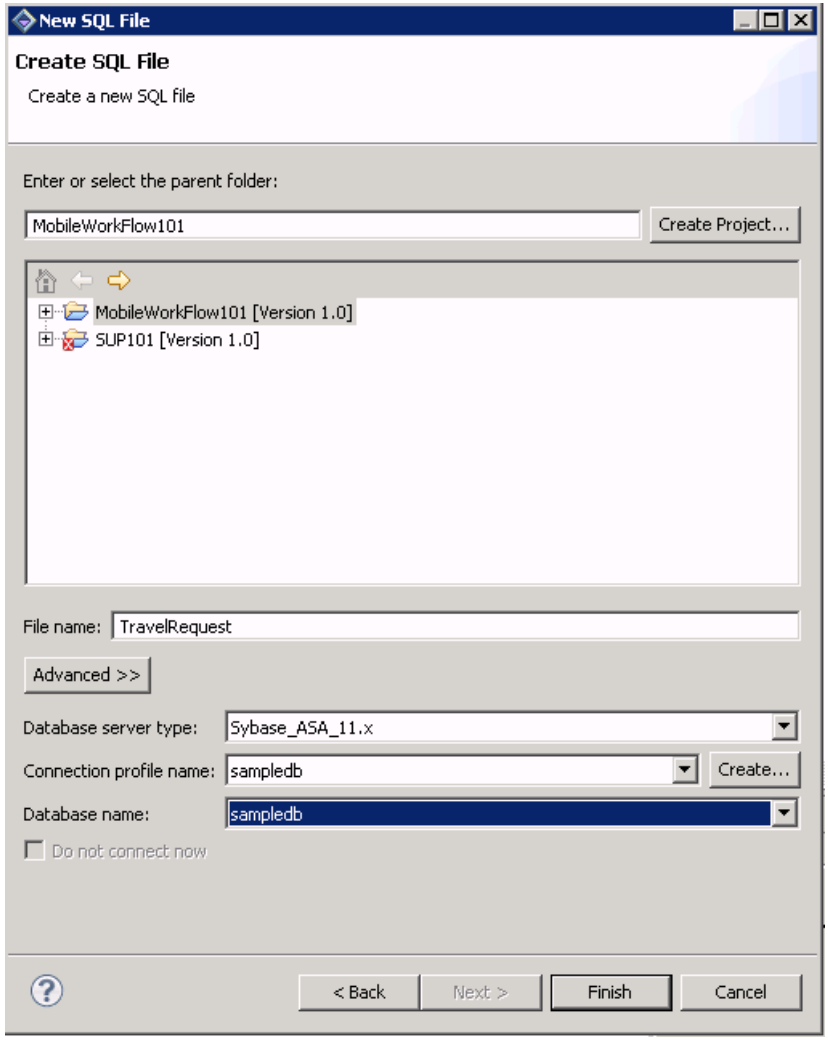
Complete *Creating the sampledb Connection Profile* on page 11.

Task

This task shows you how to create a SQL file that you can use to create a new database table, which is then used to create a mobile business object.

1. From the main menu, select **File > New > Other.**
2. Select **SQL Development** > **SQL File**, and click **Next**.
3. Enter or select the values shown and click **Finish**:

Field	Value
Parent folder	Select the **MobileWorkflow101** project.
File name	Enter `TravelRequest`.
Database server type	Select **Sybase_ASA_11.x**.
Connection profile name	Select **sampledb**.
Database name	Select **sampledb**.



4. In the `TravelRequest.sql` editor, copy and paste this code:

```
CREATE TABLE TravelRequest (
    trvl_Id                     integer NOT NULL DEFAULT
autoincrement
   ,trvl_Date                   date NULL
   ,trvl_Loc                    varchar(20) NULL
   ,est_Cost                    float NULL
   ,purpose                     varchar(200) NULL
   ,trvl_Status                 varchar(20) NULL
   ,st_Cmmnt                    varchar(200) NULL
   ,PRIMARY KEY CLUSTERED (trvl_Id)
);
```

5. Select **File** > **Save**.
6. Close the `TravelRequest.sql` file.
7. In the MobileWorkflow101 project, right-click the `TravelRequest.sql` file you created and select **Execute SQL Files**.

   This creates a database table called TravelRequest.
8. Expand the **sampledb** database you created, then expand the **Tables** folder.

   You should see the new TravelRequest table. If you do not see it, right-click the **Tables** folder and select **Refresh**.

Creating the TravelRequest Mobile Business Object

Goal: Use the TravelRequest database table to create a mobile business object.

Prerequisites

Complete *Creating the TravelRequest Database Table* on page 15.

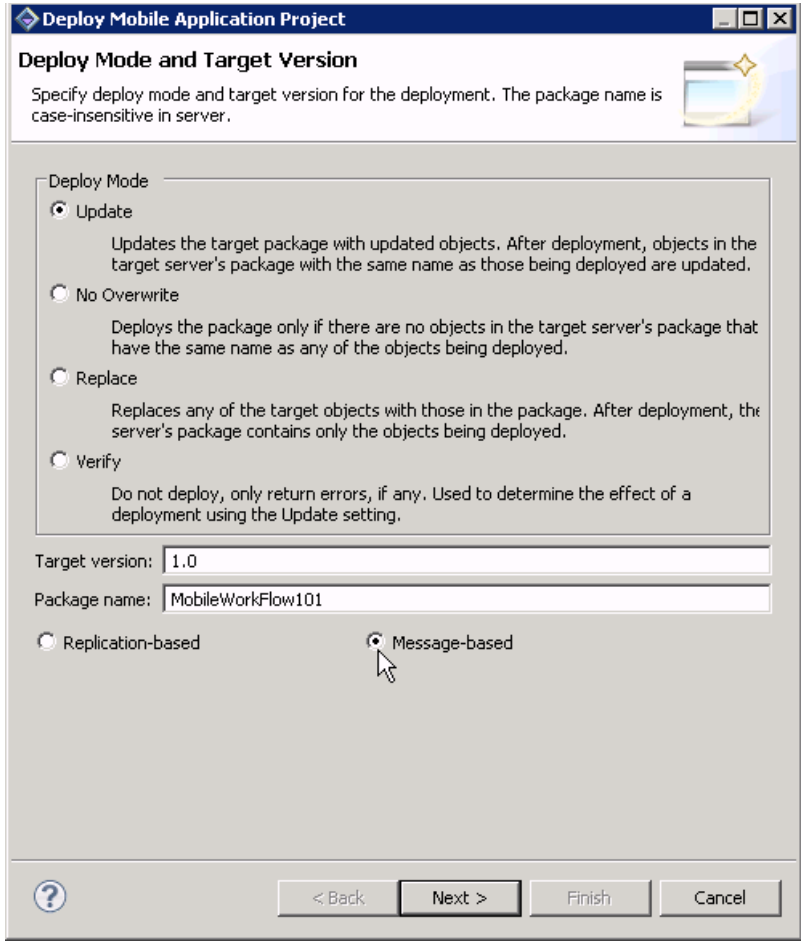
Task

1. Expand the **sampledb** database, then expand the **Tables** folder.
2. Drag and drop the TravelRequest table onto the MobileWorkflow101 Mobile Application Diagram.
3. In the Quick Create wizard, accept the defaults and click **OK**.
4. Select **File** > **Save**.

Deploying the WorkFlow101 Mobile Application Project

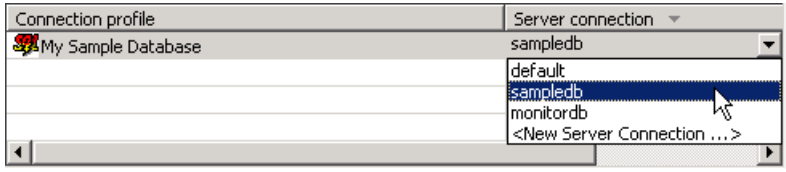
Goal: Deploy the project that contains the TravelRequest mobile business object to the server.

1. Right-click in the MobileWorkflow101 Mobile Application Diagram, and select **Deploy Project**.
2. In the first page of the Deploy Mobile Application Project wizard, select **Message-based**, accept the defaults for the other options, then click **Next**.



3. In the Contents page, select the **TravelRequest** mobile business object, and click **Next**.
4. In the Package Jars window, click **Next**.

   Note: You see the Package Jars window only if you are using the Advanced developer profile. See *Switching Between Developer Profiles* on page 19 for information.
5. In the Target Server page, from the list of available servers, select **My Unwired Server** and click **Next**.
6. In the Server Connection Mapping page, select the My Sample Database connection profile, then from Server connection, select the localhost version of **sampledb**.



7. Click **Finish**.
8. In the Deployment status window, click **OK**.
9. When the deployment completes, click **File > Close**.
10. In Enterprise Explorer, expand **Unwired Servers > My Unwired Server > Domains > default > Packages**. The server package *mobileworkflow101:1.0* into which you deployed the MBOs appears in the Packages folder. The TravelRequest mobile business object appears in the Mobile Business Objects folder.

Switching Between Developer Profiles

Switch between basic and advanced developer profiles in the Mobile Application Diagram.

If you do not see an Unwired WorkSpace feature (wizard, property, or WorkSpace Navigator item) that you expect or need, switch to the advanced developer profile, or modify developer profile settings. To use backend data sources other than those supplied by Sybase Unwired Platform, you must switch to the advanced developer profile to see the Server Connection Mapping page when deploying the Mobile Business Object package.

1. Right-click in the Mobile Application Diagram and select **Switch Developer Profile > Basic/Advanced**.
2. You can also select **Window > Preferences > Sybase, Inc. > Mobile Development > Developer Profile** to directly view or modify the developer profile preference settings. Basic is the default developer profile.

Developing the Mobile Workflow Package

Goal: Develop and deploy a mobile workflow package.

Creating a Mobile Workflow Form

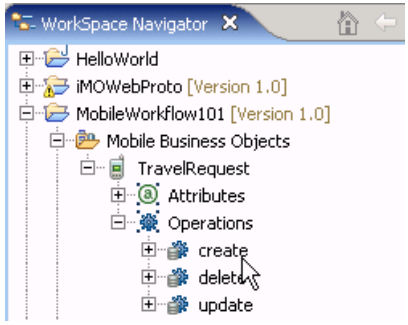
Goal: Create a mobile workflow form using the TravelRequest mobile business object.

Prerequisites

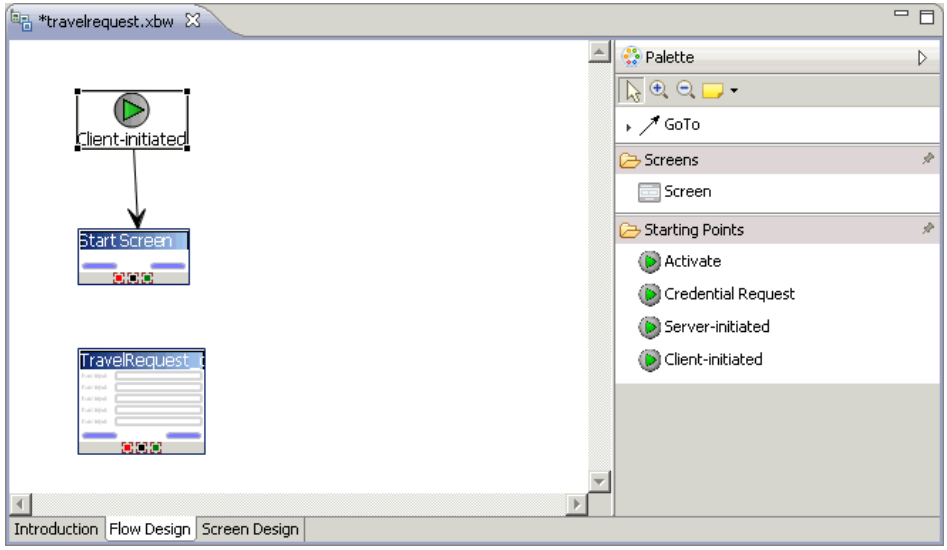
Complete *Deploying the WorkFlow101 Mobile Application Project* on page 17.

Task

1. From the main menu, select **File > New > Mobile Workflow Forms Editor**.
2. Select **MobileWorkflow101** as the parent folder and enter `travelrequest.xbw` as the file name.
3. Click **Next**.
4. Select **Can be started, on demand, from the client.** and click **Finish**.
5. In the Mobile Workflow Forms editor, click **Flow Design**.
   You see the Client-initiated start icon with the Start Screen connected to it.
6. In Workspace Navigator, expand **MobileWorkflow101 > Mobile Business Objects > TraveRequest > Operations**.

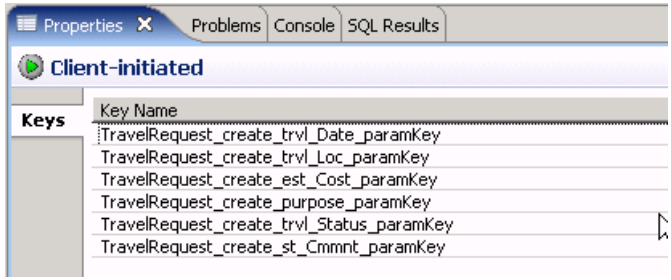


7. Drag and drop the **create** operation onto the Flow Design page.
   A TravelRequest_create screen is automatically created.



8. Add a **GoTo** connection from the Start Screen to the TravelRequest_create screen:
   a) In the Palette, click **GoTo**.
   b) Click the **Start** Screen, and while holding the mouse down, drag the connection to the **TravelRequest_create** screen.
9. Double-click the **Start** screen to open the Screen Design page.
10. From the Palette, select the **HtmlView** control and click the Start screen.
11. Click **Flow Design** to return to the Flow Design page.
12. Click the Client-initiated starting point so you can view its properties in the Properties view.

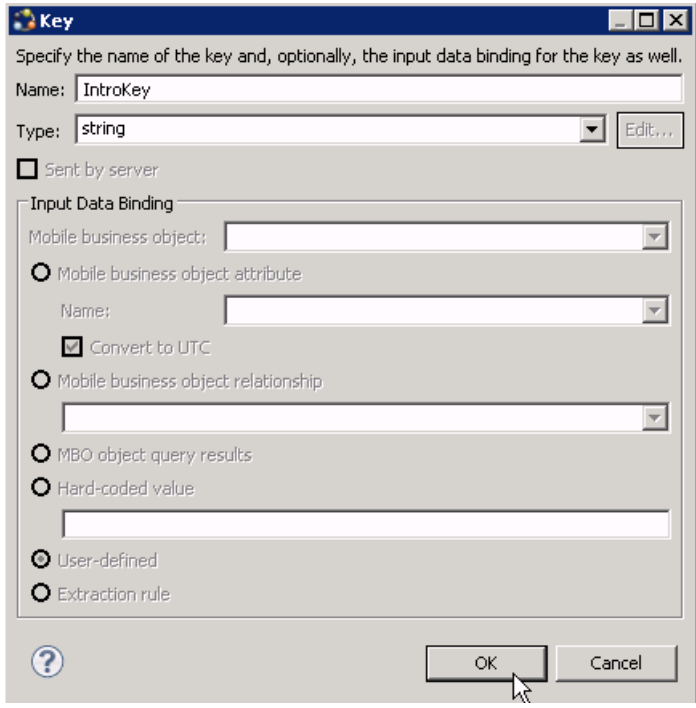
    If the Properties view does not appear, right-click the Flow Design page and select **Show Properties View**.
13. The Properties view shows all of the keys that were automatically created for each parameter in the **create** method of the TravelRequest mobile business object.



14. Create a new key for the Start screen:
    a) In the Properties view, in Keys, click **New**.

b) Enter these values:

- Name – IntroKey
- Type – string



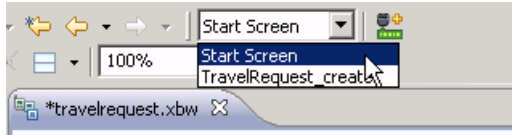
c) Click **OK**.

The new key, IntroKey, appears in the list of keys in the Properties view.

15. Define the default value for the new key:

a) Click the **Screen Design** tab.

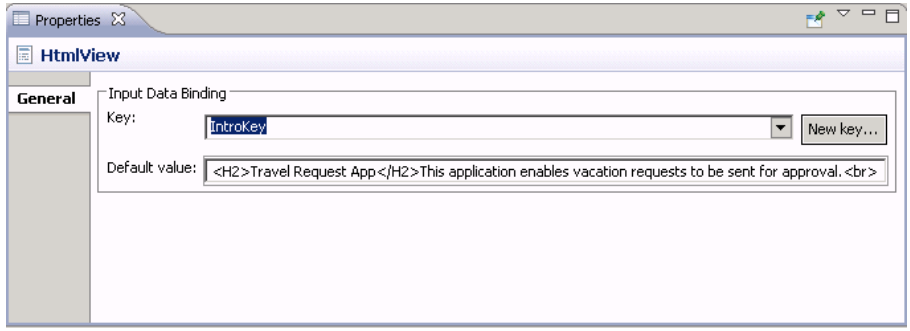
b) If necessary, select **Start Screen**.



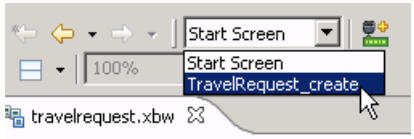
c) Select the **HtmlView** control to view the properties in the Properties view.

d) In Input Data Binding, from Key, select **IntroKey**.

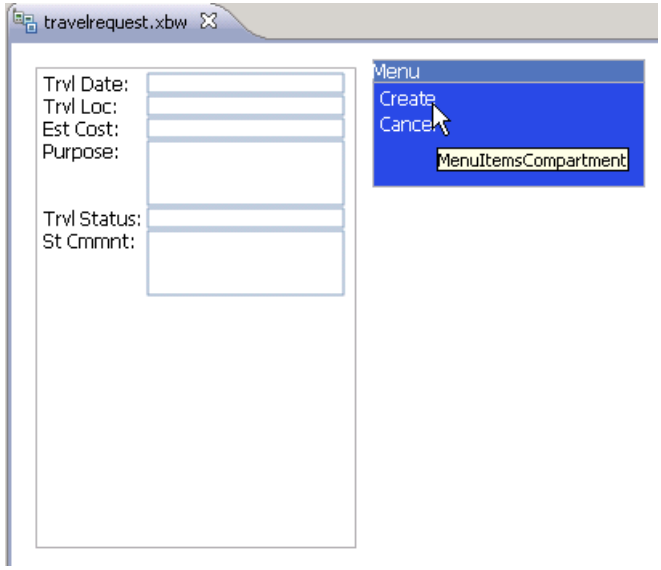
e) In Default value, enter: `<H2>Travel Request App</H2>This application enables vacation requests to be sent for approval<br>.`



16. Select **TravelRequest_create**.

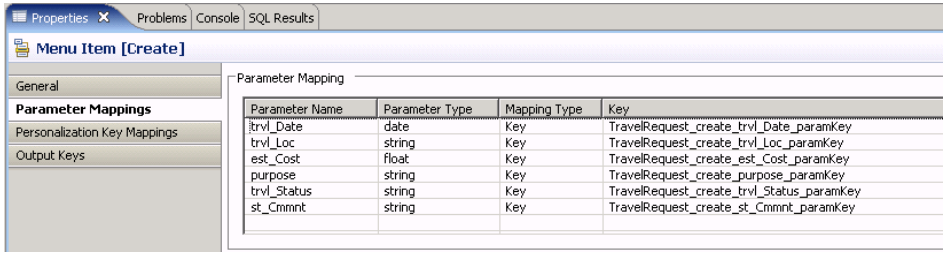


17. On the Menu, select the **Create** operation to view its properties.



18. In Properties, click **Parameter Mappings**.

    The parameter mapping table shows the mobile business object parameters for the operation and the keys that are used for those parameters.



19. Select **File** > **Save**.

Installing the Mobile Workflow Package

Configure the emulator or simulator, install the Mobile Workflow package, and generate the Mobile Workflow package files.

Configuring the Android Simulator

Configure the Android simulator.

Prerequisites

Install the Android SDK and run the SDK Manager to install SDK Platform Android version 2.2 or higher, Android SDK Platform-tools, and Android SDK Tools.

Task

1. Run the Android SDK Manager and select **Virtual devices**. Click **New**, provide a name, and select 2.2 or higher for the target.
2. In the Android Simulator, start the newly created virtual device.
3. (Optional) Select **Wipe User Data**.
4. Run `platform-tools\adb` and install `SybaseDataProvider.apk` and `Workflow.apk`, which are located in `\UnwiredPlatform\ClientAPI \Workflow\Android`.

The Sybase Mobile Workflow application should now appear in the simulator.

Configuring the Windows Mobile Emulator

Follow these steps to configure the Windows Mobile emulator for the Mobile Workflow package deployment.

Prerequisites

Installing Microsoft Synchronization Software on page 5

Task

This tutorial uses a Windows Mobile 6.0 Professional Edition emulator. If you use a different emulator version, the user interface will vary slightly from this tutorial.

1. *Installing Sybase Messaging Runtime* on page 28

2. *Configuring Connection Settings* on page 28

Installing Sybase Messaging Runtime

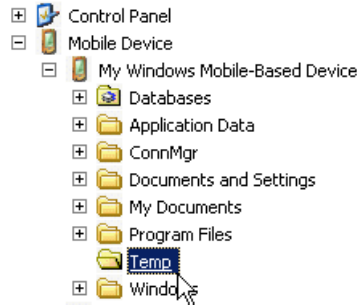
Start the Device Emulator Manager and your synchronization software, cradle the device, and install Sybase Messaging Runtime.

Prerequisites

1. The Sybase Messaging runtime client requires that you have Microsoft .NET Compact Framework 3.5 Redistributable installed.
2. The synchronization software must be running and the device must be connected and cradled.

Task

1. Start the Device Emulator Manager.
2. From the list of devices, right-click the device you want to use, and select **Connect**.
3. Right-click on the device again and select **Cradle**.
   The synchronization software appears.
4. Go to `<UnwiredPlatform_InstallDir>\UnwiredPlatform\ClientAPI\Workflow\WM\` and copy the **SUPMessaging_Pro.cab** file to a folder on your mobile device, for example:



5. Use File Explorer on the device emulator to browse to the `SUPMessaging_Pro.cab` file.
6. Click on `SUPMessaging_Pro.cab` once to start the installation.

Configuring Connection Settings on Windows Mobile

Goal: Configure the connection settings on the Windows Mobile emulator.

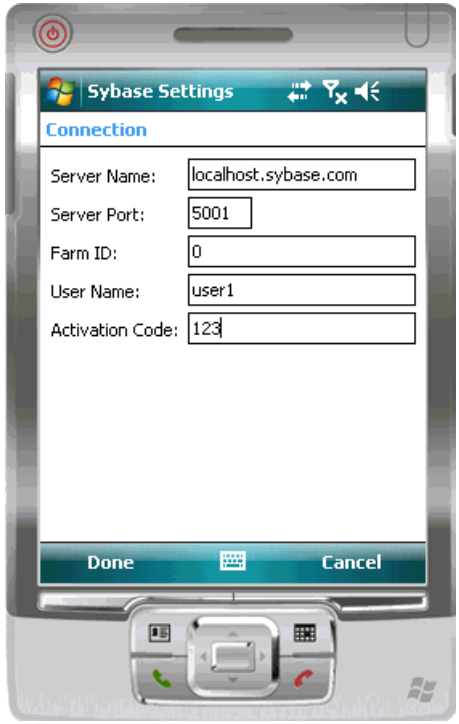
Prerequisites

Complete *Installing Sybase Messaging Runtime* on page 28.

Task

Note: This tutorial uses a Windows Mobile 6.0 Professional Edition emulator. If you use a different emulator version, the user interface will vary slightly from this tutorial.

1. On the emulator, select **Start** > **Programs** > **Sybase Settings**.
2. In the Sybase Settings screen, click **Connection**.
3. In the Connection screen, enter the connection settings:
   - Server Name – the machine that hosts the server where the mobile application project is deployed.
   - Server Port – Unwired Server port number. The default is 5001.
   - Farm/Company ID – the farm or company ID you entered when you registered the device in Sybase Control Center, in this case, 0 (zero).
   - User Name – the user you registered in Sybase Control Center, `user1`
   - Activation Code – the activation code for the user, `123`.



Note: "localhost" should be the name of your machine.

4. Click **Done**.

Installing the Mobile Workflow Container Using the Provided Source Code

The mobile workflow container referenced in this procedure is a sample container. You can use the provided source code in Xcode to build your own customized user interface and configure other resources.

Prerequisites

- Register the device in Sybase Control Center
- You must have a Mac with iOS SDK 4.3 installed.
- Xcode 3.2.6 or higher.

Task

1. From your Mac, connect to the Microsoft Windows machine where Sybase Unwired Platform is installed:
   a) From the Apple menu, select **Go** > **Connect to Server**.
   b) Enter the name or IP address of the machine, for example, `smb://<machine DNS name>` or `smb://<IP Address>`.
2. Copy the `MobileWorkflow-2.0.1.tar.gz` from your Sybase Unwired Platform installation `<UnwiredPlatform_InstallDir>\UnwiredPlatform\ClientAPI\Workflow\ios\` to a location on your Mac:
3. Unarchive the `MobileWorkflow-2.0.1.tar.gz`.

   This creates a `Workflow` folder.
4. Copy over the libraries from `<UnwiredPlatform_InstallDir>\UnwiredPlatform\ClientAPI\MBS\ObjectiveC\libs` into the Workflow directory on your Mac.
5. In the Workflow folder, double-click **WorkFlow.xcodeproj** so that it opens in the XCode IDE.
6. If necessary, add these frameworks from the SDK to the project by selecting **Project** > **Edit Active Target <ProjectName>** > **General**:
   - `Security.framework`
   - `AddressBook.framework`
   - `QuartzCore.framework`
   - `CoreFoundation.framework`
   - `libicucore.A.dylib`
   - `libz.1.2.3.dylib`

- `libstdc++.dylib`

7. In XCode, select **Build** > **Build**.

   The project builds.

Configuring iPhone Connection Settings

Goal: Configure the settings for the Mobile Workflow application.

1. When the iPhone simulator launches, the TravelRequest workflow application appears. Cancel out of the Assigned Workflows screen.
2. Go to your iPhone simulator Settings and click **WorkFlows**.
3. Enter the settings for the SUP Mobile Workflow application:
   - Server Name – the machine that hosts the server where the mobile application project is deployed.
   - Server Port – Unwired Server port number. The default is 5001.
   - Company ID – the company ID you entered when you registered the device in Sybase Control Center, in this case, 0 (zero).
   - User Name – the user you registered in Sybase Control Center, `user1`
   - Activation Code – the activation code for the user, `123`.

Generating Code for a Mobile Workflow Package

Goal: Generate the files for the Mobile Workflow package and deploy them to the Unwired Server.

Prerequisites

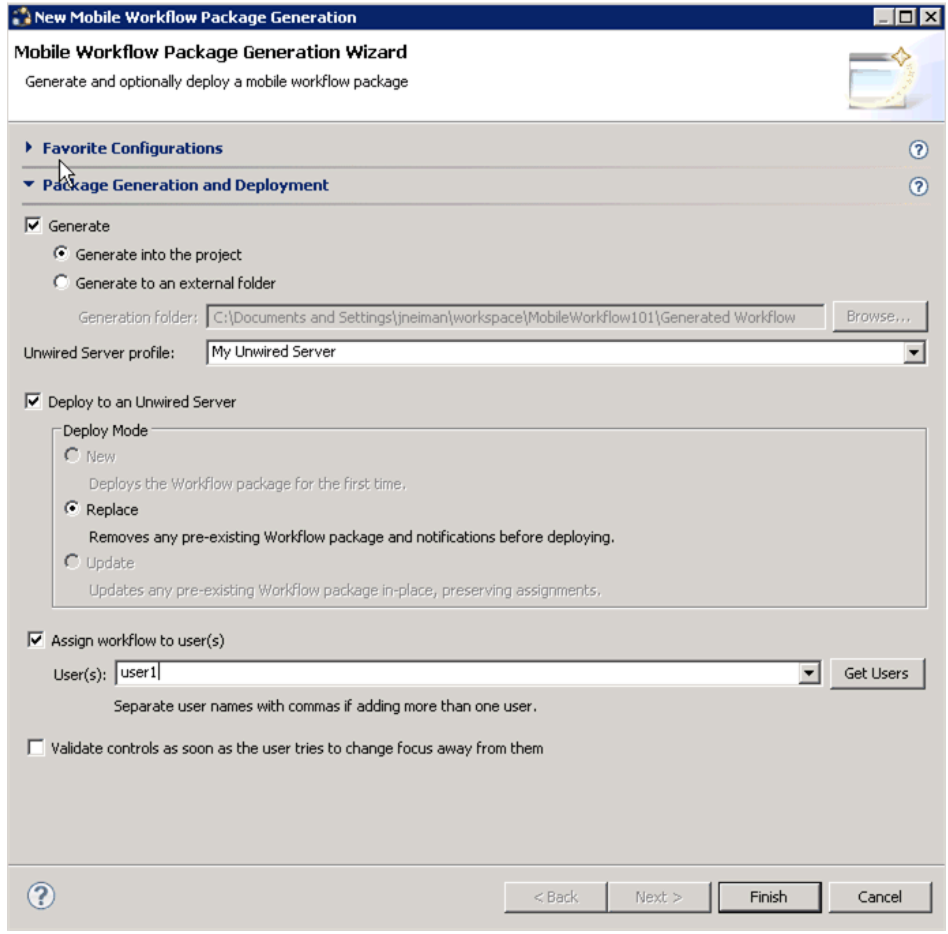
Complete these tasks:

- *Registering the Device in Sybase Control Center* on page 8
- Complete *Developing a Database Mobile Business Object* on page 15.
- Complete *Creating a Mobile Workflow Form* on page 21.
- If Microsoft ActiveSync is not running, start it now. (Windows XP)
- If Windows Mobile Device Center is not running, start it now. (Windows Vista, Windows 7, Windows 2008)

Task

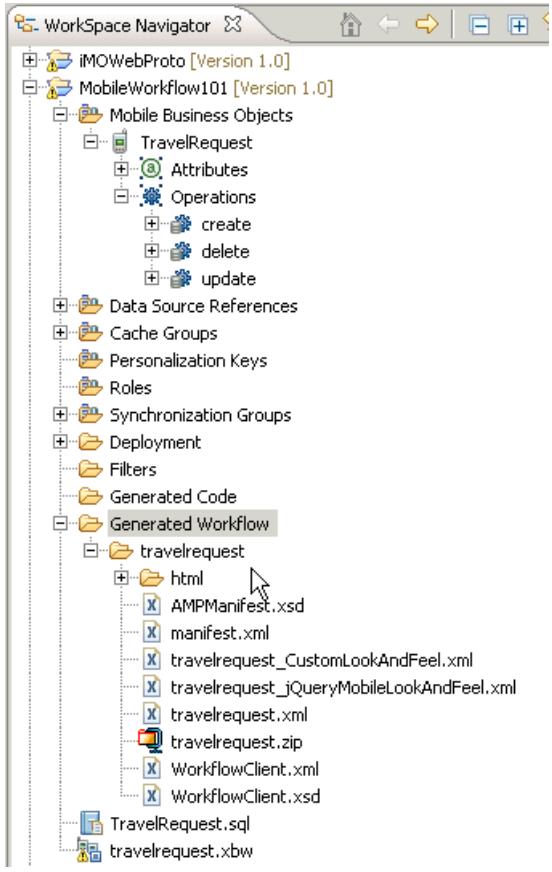
1. In the Mobile Workflow Application Designer, click .
2. In the New Mobile Workflow Package Generation wizard, select:

Option	Description
Favorite configurations	(Optional) Select a configuration.
PackageGeneration and Deployment	
Generate	Select **Generate into the project**.
Unwired Server Profile	Select **My Unwired Server** as the profile with which to associate the mobile workflow package.
Deploy to an Unwired Server	Deploy the mobile workflow package to an Unwired Server.
Assign workflow to users	Select this option, and click **Get Users**. Select **user1**.

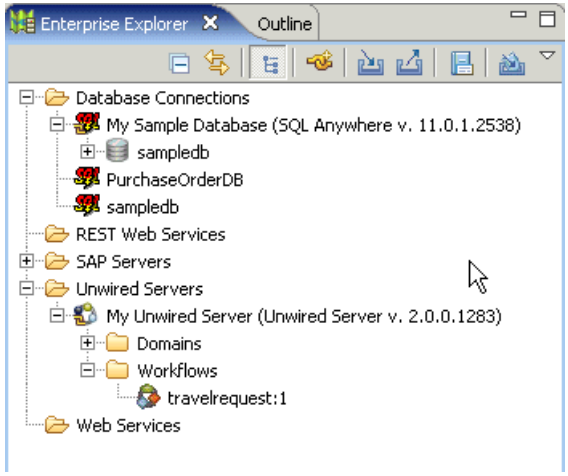


3. In the Mobile Workflow Package Generation wizard, click **Finish**.

   The files for the mobile workflow package are generated and stored in the specified location as a `.zip` file.



The mobile workflow package appears in Enterprise Explorer in the Workflows folder under Unwired Server.


Enterprise Explorer
Outline
Database Connections
My Sample Database (SQL Anywhere v. 11.0.1.2538)
sampledb
PurchaseOrderDB
sampledb
REST Web Services
SAP Servers
Unwired Servers
My Unwired Server (Unwired Server v. 2.0.0.1283)
Domains
Workflows
travelrequest:1
Web Services

Viewing and Running the Mobile Workflow Package

After generating the Mobile Workflow package files and deploying it to Unwired Server, you can view and run the Mobile Workflow application.

Running the Mobile Workflow Form on the Android Simulator

Goal: Run the travelrequest mobile workflow form on the Android simulator.

1. Click **Menu** and select **Workflow**.
2. Click the **travelrequest** icon.
3. Click **Open TravelRequest** and enter your travel request information.
4. Click **Create**.

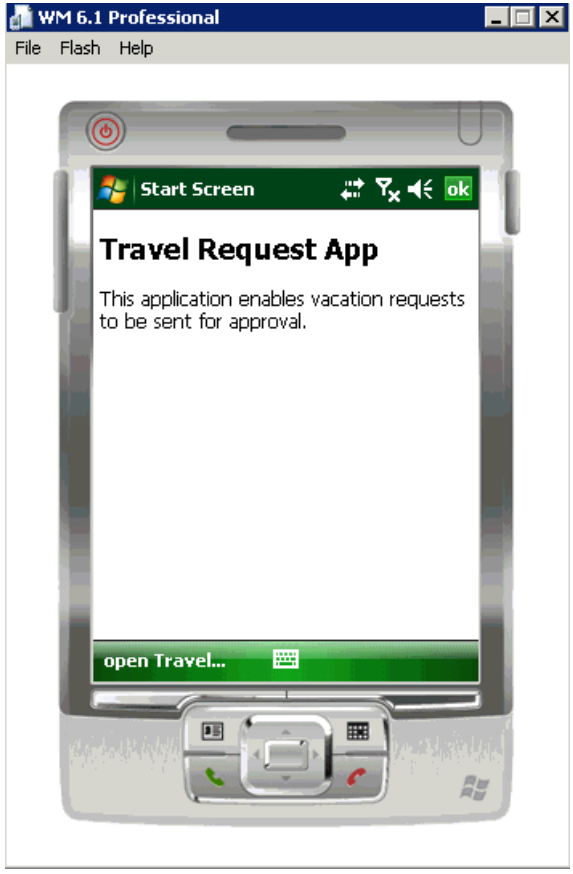
   The mobile workflow form closes on the emulator, and the `TravelRequest` database table is updated on the back end.

Viewing and Running the Mobile Workflow Form on the Windows Mobile Emulator

Goal: Run the travelrequest mobile workflow form on the Windows Mobile emulator.

1. In the Outlook e-mail inbox, click **Menu** and select **Workflows**.

2. Click the **travelrequest** icon.



3. Click **Open TravelRequest**.

   Enter your travel request information.

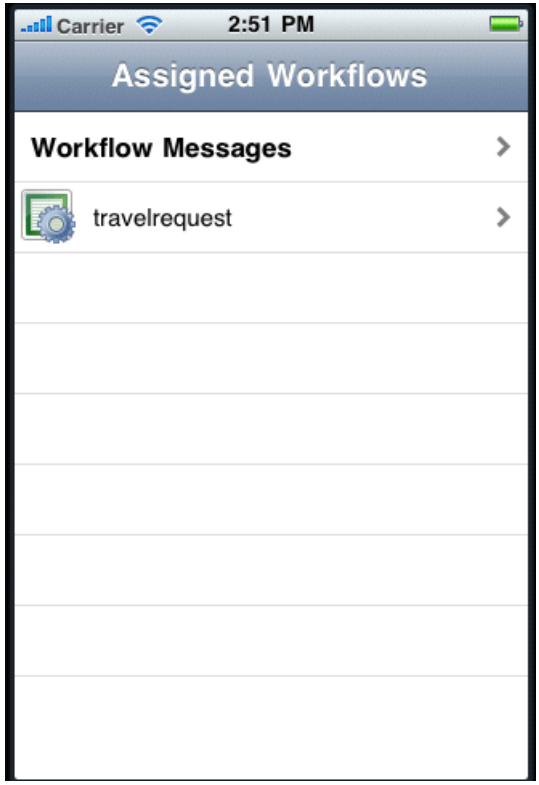
4. Click **Create**.

   The mobile workflow form closes on the emulator, and the TravelRequest database table is updated on the backend.

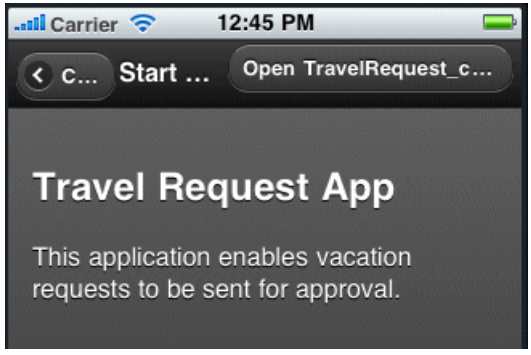
Viewing and Running the Mobile Workflow Form on the iPhone Simulator

Goal: Run the travelrequest mobile workflow form on the iPhone simulator.

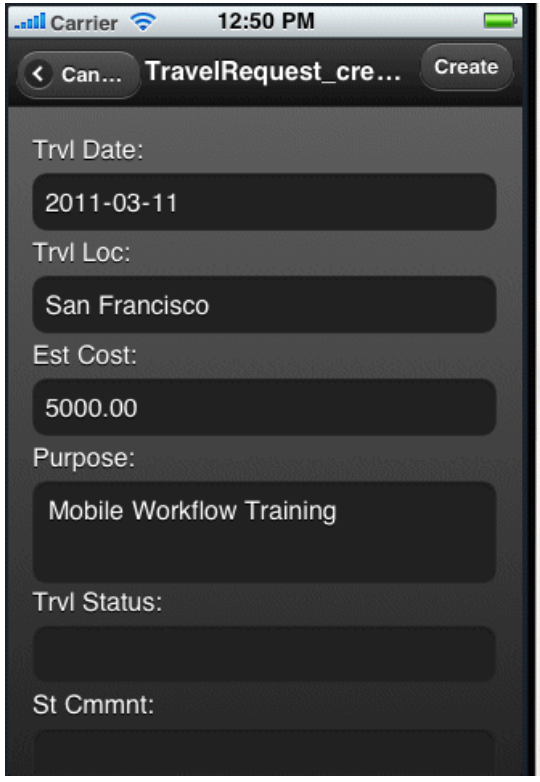
1. Click the **Workflows** icon to open the Workflows.
2. Click **travelrequest** to open the travelrequest Mobile Workflow.



3. In the introduction page, click Open TravelRequest.



4. Fill out the information for the travel request, and click **Create**.

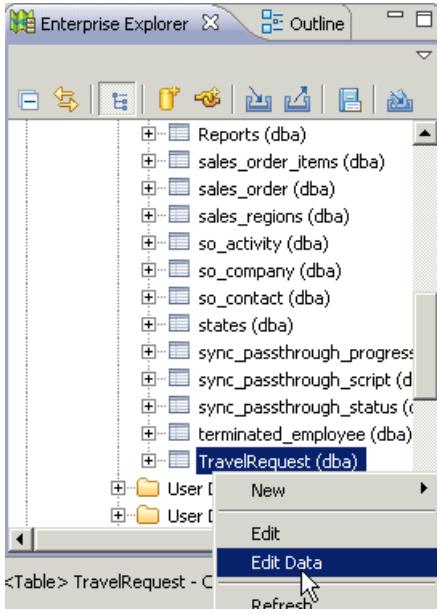


The mobile workflow form closes on the simulator, and the TravelRequest database table is updated on the backend.

Verifying the Data on the Backend Database

Goal: After you submit the travel request, verify that the information was updated in the database.

1. Go to Unwired WorkSpace and in Enterprise Explorer, expand the **sample** database, then expand the **Tables** folder.
2. In Tables, right-click the **TravelRequest** table and select **Edit Data**.



3. In the Table Data Filter dialog, accept the defaults and click **OK**.

   The TravelRequest table opens and you see the new row.

Learn More about Sybase Unwired Platform

Once you have finished, try some of the other samples or tutorials, or refer to other development documents in the Sybase Unwired Platform documentation set.

Check the Sybase Product Documentation Web site regularly for updates: *http://infocenter.sybase.com/help/index.jsp?topic=/com.sybase.infocenter.pubs.docset-SUP-2.0.0/doc/html/title.html*.

Tutorials

Try out some of the other getting started tutorials to get a broad view of the development tools available to you.

Samples

Sample applications are fully developed, working applications that demonstrate the features and capabilities of Sybase Unwired Platform.

Check the SAP Development Network (SDN) Web site regularly for updates: *http://www.sdn.sap.com/irj/sdn/mobile*. Click on Sybase Unwired Platform and navigate to Samples.

Online Help

See the online help that is installed with the product, or the Product Documentation Web site.

Developer Guides

Learn about using the API to create device applications:

- *Developer Guide for BlackBerry*
- *Developer Guide for iOS*
- *Developer Guide for Mobile Workflow Packages*
- *Developer Guide for Windows and Windows Mobile*

Customize and automate:

- *Developer Guide for Unwired Server Management API* – customize and automate system administration features.
- *Developer Guide for Unwired Server* – customize and automate server-side implementations for device applications, and administration, such as data handling.

Javadoc and HeaderDoc are also available in the installation directory.

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