SYBASE®

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Installation Guide for Sybase Mobile SDK

Sybase Unwired Platform 2.1

Windows

Contents

CHAPTER 1 **Getting Started**

Before you begin installing Sybase® Mobile SDK, familiarize yourself with system requirements and installation prerequisites.

Although Mobile SDK works closely with the Unwired Server component in Sybase Unwired Platform Runtime, the installation of Mobile SDK is independent of the Unwired Server installation. Mobile SDK may be installed on a server or developer workstation, with or without Unwired Server. If Unwired Server has already been installed, there is no need to shut down the Unwired Server services before installing or uninstalling Mobile SDK.

For information on system requirements for Sybase Mobile SDK, see *Supported Hardware and Software*.

For information on installing an Unwired Server instance to work with your Mobile SDK installation, see *Installation Guide for Runtime*.

Obtaining a License

There are two ways to obtain your Unwired Platform license, depending on how you purchased the product.

When you purchase SySAM 2-enabled Sybase products, you must generate, download, and deploy SySAM product licenses.

*   If you purchased your product from Sybase or an authorized Sybase reseller, go to the secure Sybase Product Download Center (SPDC) at *https://sybase.subscribenet.com* and log in to generate license keys. The license generation process may vary slightly, depending on whether you ordered directly from Sybase or from a Sybase reseller.
*   If you ordered your product under an SAP® contract and were directed to download from SAP Service Marketplace (SMP), you can use SMP at *http://service.sap.com/licensekeys* to generate license keys for Sybase products that use SySAM 2-based licenses.

Next

For more complete information about SySAM, see:

*   *SySAM Asset Management Users Guide* online at *SySAM FAQ*
*   *Fast Track to SySAM 2.0* white paper, available at *Fast Track to SySAM 2.0*

Determining Host IDs

When you generate licenses at SPDC or SMP, you must specify the host ID of the machine where the licenses will be deployed.

- For unserved licenses, specify the host ID of the machine where the product will run. If you are running a product with per-CPU or per-CHIP licensing that supports SySAM sub-capacity, and you want to run the product in a virtualized environment, see *SySAM Sub-capacity Licensing* in the *SySAM Users Guide* for information about determining the host ID for unserved licenses.
- For served licenses, specify the host ID of the machine where the license server will run.

SPDC or SMP remembers the host information so that you can select the same license server when generating additional licenses.

To determine the host ID of the machine, run the **lmutil** utility from a terminal window or the Windows command prompt. For example:

```
lmutil lmhostid
```

Note: You can download the **lmutil** utility from the Flexera Software Web site at *http://www.globes.com/support/fnp_utilities_download.htm*.

You can also determine the host ID using native operating system commands. See the Frequently Asked Questions topic "What is my Host ID?":

- SPDC: *https://sybase.subscribenet.com/control/sybs/faqs#30-4*
- SMP: *https://websmp208.sap-ag.de/~sapidb/011000358700001006652011E*

Comparing License Deployment Models

Learn about license deployment models.

Unserved Licenses	Served Licenses
Licenses can be used only on the machine for which the license was generated.	Licenses can be distributed from a network license server to products running on any network machine.
Generate licenses at SPDC or SMP for each machine that will run the product: 1. Specify the host ID of the machine where the product will run. 2. Generate a license for that machine. 3. Save the license to the specified machine. 4. Repeat steps 1 – 3 for each machine where the product will run.	Generate licenses at SPDC or SMP for products running on multiple machines: 1. Specify the host ID of the license server. 2. Specify the number of required licenses. 3. Save the licenses to the license server host machine.

Unserved Licenses	Served Licenses
No license administration is required. However, when new licenses are required for product updates, you must update and deploy each license for each machine where the product update will run.	The license server requires administration. When new licenses are required for product updates, SPDC or SMP lets you update all licenses for a specific license server in a single step.
No license reporting or asset management capabilities are available.	Allows license monitoring and reporting of license use, capacity planning, and asset management using SAMreport.
Installed locally and always available.	Requires a functioning license server and network. If the license server or network fails, you must fix the problem or install an alternate license server before the product grace period expires.
If a machine where the product is running fails, you must regenerate all of its licenses and deploy those licenses to the replacement machines.	If a machine where the product is running fails, you can move the product to a new machine, and it will acquire licenses from the running license server. If the license server host machine fails, use the Manage License Hosts functionality at SPDC or SMP to move its licenses to a new network license server host.
License files are distributed across each machine running a product, and therefore they are difficult to manage and control.	License files are centrally located and managed.
Unserved Standalone Seat (SS) licenses do not allow product use via Remote Desktop Connection or other terminal services clients.	Products can be used via Remote Desktop Connection or other Terminal Services clients, irrespective of the type of license in use.

Generating Licenses at SPDC

Before you log in to SPDC and generate licenses, use this information as a reminder of the information you should have available and the tasks that you should have completed.

Table 1. Information Needed Before License Generation

Required Information or Action	License Model		Description
	Served	Un-served	
License deployment model	X	X	Decide whether to use a served or unserved license deployment model. Typically, this is a company-wide decision that is made only once. Therefore, this is one of the most important things to determine before license generation.

Required Informa-tion or Action	License Model		Description
	Served	Un-served	
Product machine host ID		X	Determine the host ID of the machine, or ma-chine partition where the product will run.
License server – down-load and install	X		Download and install the SySAM license server before you generate the product's licenses, and before you install the product.
License server host ID	X		Determine the host ID of the machine where the license server will run.
License server host name	X		Determine the host name of the machine where the license server will run.
License server TCP/IP port numbers	X		Determine the port numbers on which the license server will listen for license requests. **Note:** If you do not specify the license server port numbers during license generation, the license server uses the first available ports in the range 27000 to 27009. If a firewall exists between the server and the client machines, fix the license server port numbers to allow access to the ports. See *Access Through a Firewall or VPN* in the *SySAM Users Guide*.

Logging in to SPDC and Beginning License Generation

Once you log in to SPDC and begin license generation, complete your product's license generation using the procedure that applies to the license deployment model you chose, either for generating served licenses or for generating unserved licenses.

If your product has been ordered from a Sybase reseller, perform the "Web Key step" instructions, where noted.

1. Go to the SPDC login page at *https://sybase.subscribenet.com*.

    • Go to the SPDC Web Key Registration page at *https://sybase.subscribenet.com/ webkey*.

2. Enter the login ID and password, then click **Login**. If you forget your password, click **Password Finder**.

    Your password is sent to you in an e-mail message.
    • Enter the authorization string from the Web Key Certificate provided by the reseller when your Sybase product was purchased, then click **Submit Web Key**.

Note: If you do not know your SPDC account login ID and password, or Web Key Certificate authorization string, contact the person who ordered your product.

- At the Web Key Registration page, enter your account information, then click one of these options:
  - **Submit My Registration Information** – to register your product using your direct account information.
  - **Anonymous Activation** – to activate your product anonymously.

3. Select the product family that includes the product for which you want to generate a license; for example, Adaptive Server Enterprise.

4. Depending on the product family you choose, you may see an additional Product Information page.

   1. Product suites – if your product is included in one or more suites, select the suite that includes your product; for example, ASE Small Business Edition.
   2. Product version and platform – select the product version, name, and operating system that matches your product order.

5. If this is the first time you selected a specific product edition and platform, you must accept the Sybase License Agreement before you are allowed to generate a license for that product.

6. If your product software installation requires a license key (also referred to as the license file), click **License Keys** on the Product Download page.

7. On the License Information page:

   1. Select the option button to the left of the product for which to generate a license; for example, "CPU License (CP), ASE Enterprise Edition 15.7 for Sun Solaris SPARC 64-bit."
   2. Scroll down and click **Select to Generate**.

8. In the Generate Licenses wizard, choose a license deployment model:

   - **Served license** – go to *Generating Served Licenses* in the *Sybase Software Asset Management (SySAM) 2 Users Guide* to complete the license generation and download process.
   - **Unserved license** – go to *Generating Unserved Licenses* in the *Sybase Software Asset Management (SySAM) 2 Users Guide* to complete the license generation and download process.

   Note: Some Sybase products or license types do not offer a choice of license deployment models and do not display this page. If this is the case, continue through the Generate Licenses wizard to generate your license.

   Click **Next**.

Generating Unserved Licenses

Generate and download an unserved license for your product.

1. Enter the number of machines (up to 10) for which to generate unserved licenses, and click **Next**.

2. Enter:
   - **Node Host ID** – enter the host ID of the machine where the product will be run. If you do not know the host ID, select **What Is My Host ID?** or see *Determining Host IDs* in the *Sybase Software Asset Management (SySAM) 2 Users Guide*.
   - **Host Name** – enter the machine host name.

   For some license types, you must enter the number of licenses to generate. If you are unsure of the license quantity, select **How Many Licenses Should I Generate?**.

3. Click **Generate.**

4. When the license has generated, review the information on the View Licenses page, then, if the license information is correct, select one of:
   - If you generated only one license, click **Download License File**.
   - If you generated several licenses, click **Download All Licenses for Host**.

     Note: Before you download and save generated licenses, you can select **Print Friendly** to print a paper copy of the license, or **License Overview** to return to the License Information page and generate additional licenses.

   - To correct license information before downloading the license, click **License Overview**, select the license to be corrected and click **Check In** to reset the license to its original state. Repeat the license generation process.

5. If you chose to download licenses, when the File Download dialog box opens, click **Save**.

6. Save the generated licenses with a `.lic` file name extension. Although *$SYBASE /* `SYSAM-2_0/licenses` is typically the directory where unserved licenses are located, your product may have a different requirement. See your product installation guide and release bulletin for product-specific information.

   Note: If you do not save the license files with a `.lic` extension, SySAM does not recognize the licenses.

Next, install your licensed product using the instructions in the product installation guide and release bulletin.

Generating Served Licenses

Generate and download a served license for your product.

1. Enter the number of licenses to generate and click **Next** .

If you are unsure of the license quantity, select **How Many Licenses Should I Generate?**.

2. Select an existing license server host, or enter the host ID, and an optional host name and port number, of a new license server host.

   When completing this step, use these recommendations:

   - If you do not know the license server host ID, select **What Is My host ID?** or see *Determining Host IDs* in the *Sybase Software Asset Management (SySAM) 2 Users Guide*.
   - Although the host name is optional, Sybase recommends that you provide the host name to ease future license administration.
   - The port number is optional unless your product configuration is going to use three-server redundancy (see the next bullet item). Any unused port number between 0 and 64000 is valid. On UNIX, choose a port number greater than 1024; most port numbers less than 1024 are privileged port numbers. If you do not specify a TCP/IP port number, a default port between 27000 and 27009 is used.
   - To generate a license for a three-server redundant configuration, enter the required information: license server host ID, host name, and port number for all three machines. Enter a port number outside of the 27000 to 27009 range. You must enter the fully qualified domain name (FQDN) as the host name if any client machine requires an FQDN to contact a license server machine.

     Note: You cannot upgrade SySAM 1.0 licenses and use them in a three-server redundant configuration.

3. Click **Generate.**
4. When the license has generated, review the information on the View Licenses page, then, if the license information is correct and you do not need to generate additional licenses, select one of:
   - If you generated only one license, click **Download License File**.
   - If you generated several licenses, click **Download All Licenses for Host**.

     Note: Before you download and save generated licenses, you can select **Print Friendly** to print a paper copy of the license.

   a) To correct license information, click **License Overview**, select the license to be corrected and click **Check In** to reset the license to its original state. Repeat the license generation process, starting with step 1 of this procedure.
   b) To generate additional licenses, click **License Overview** and repeat the generation process for the additional product licenses.
5. When the File Download dialog box opens, click **Save.**
6. Save the license files with a `.lic` file name extension to the `SYSAM-2_0/licenses` directory of the license server installation.

> **Warning!** If you do not save the license files with a `.lic` extension, SySAM does not recognize the licenses.

7. After you save the license files to the license server, enter on the machine where your license server is running:

```
sysam reread
```

Your new licenses are registered with the license server.

Generating Licenses at SMP

Before you log in to SMP and generate licenses, use this information as a reminder of the information you should have available and the tasks that you should have completed.

Table 2. Information Needed Before License Generation

Required Informa-tion or Action	License Model		Description
	Served	**Un-served**	
License deployment model	X	X	Decide whether to use a served or unserved license deployment model. Typically, this is a company-wide decision that is made only once. Therefore, this is one of the most important things to determine before license generation.
Product machine host ID		X	Determine the host ID of the machine, or machine partition where the product will run.
License server – download and install	X		Download and install the SySAM license server before you generate the product's licenses, and before you install the product.
License server host ID	X		Determine the host ID of the machine where the license server will run.
License server host name	X		Determine the host name of the machine where the license server will run.
License server TCP/IP port numbers	X		Determine the two port numbers on which the license server will listen for license requests.

Generating License Keys

If you have purchased Sybase products that use SySAM 2-based licenses under SAP contract and are directed to download from SAP Service Marketplace (SMP), you can use SMP to generate license keys.

1. Go to the SAP Marketplace main page at *http://service.sap.com*.
2. Select **SAP Support Portal**.
3. Log in using your SMP credentials.
4. Select **Keys & Requests > License Keys**.
5. Follow the instructions in the "How to generate license keys for SAP Sybase products" presentation available under the "Documentation and Helpful Resources" quick access link.

Locating Information in a License File

After you download a license file, you may need to get some information from it to complete your installation.

1. Use a text editor to open your license file.
2. Locate the uncommented line that begins with the string for your Unwired Platform edition:
   - Enterprise Edition – `INCREMENT SUP_ENTSRVR`
   - Enterprise Developer Edition – `INCREMENT SUP_ENTDEV`
   - Personal Developer Edition – `INCREMENT SUP_DEVELOPER`

   For example:
   - Enterprise Edition would be similar to this.

     ```
     ...
     INCREMENT SUP_ENTSRVR SYBASE 2011.11150 permanent uncounted \
        VENDOR_STRING=PE=EE;LT=CP HOSTID=000c29d300bd
     PLATFORMS="i86_n \
     ...
     ```
   - Enterprise Developer Edition would be similar to this.

     ```
     ...
     INCREMENT SUP_ENTDEV SYBASE 2011.11150 permanent uncounted \
        VENDOR_STRING=PE=EE;LT=CP HOSTID=000c29d300bd
     PLATFORMS="i86_n \
     ...
     ```
   - Personal Developer Edition would be similar to this.

     ```
     ...
     INCREMENT SUP_DEVELOPER SYBASE 2011.11150 permanent uncounted \
        VENDOR_STRING=PE=EE;LT=CP HOSTID=000c29d300bd
     ```

```
PLATFORMS="i86_n \
...
```

The rest of the examples in this section show the beginning of this line as it would appear for Enterprise Edition. The details illustrated apply equally to all editions.

3. Determine whether the server license is served or unserved.

If the line you located in step 2 ends with "uncounted" it is an unserved license. For example:

```
...
INCREMENT SUP_ENTSRVR SYBASE 2011.11150 permanent uncounted \
   VENDOR_STRING=PE=EE;LT=CP HOSTID=000c29d300bd PLATFORMS="i86_n
\
...
```

If that line ends with a number immediately following a date, it is a served license. For example:

```
...
INCREMENT SUP_ENTSRVR SYBASE 2011.11150 permanent 10 \
   VENDOR_STRING=PE=EE;LT=CP HOSTID=000c29d300bd PLATFORMS="i86_n
\
...
```

4. Determine the product edition and license type for the license.

For both served and unserved licenses, note the value of PE (product edition) and LT (license type) in the line following the line you located in step 2. For example:

```
...
INCREMENT SUP_ENTSRVR SYBASE 2011.11150 permanent uncounted \
   VENDOR_STRING=PE=EE;LT=CP HOSTID=000c29d300bd PLATFORMS="i86_n
\
...
```

The PE value is the license product edition value; "EE" in the example above.

The LT value is the license type value; "CP" in the example above.

5. If you are installing Enterprise Edition, determine the number of client licenses.

If your license type is Development and Test (DT), you can change this number later.

a) Locate the uncommented line, beginning with INCREMENT SUP_ENTCLIENT.

For example:

```
INCREMENT SUP_ENTCLIENT SYBASE 2011.11150 permanent uncounted \
         VENDOR_STRING=PE=EE;LT=ST HOSTID=000c29d300bd
PLATFORMS="i86_n \
...
```

b) Determine whether the client licenses are served or unserved.

If the line beginning with INCREMENT SUP_ENTCLIENT ends with "uncounted" the client licenses are unserved. For example:

```
INCREMENT SUP_ENTCLIENT SYBASE 2011.11150 permanent uncounted \
    VENDOR_STRING=PE=EE;LT=ST HOSTID=000c29d300bd
PLATFORMS="i86_n \
```

```
   x64_n" ISSUER="CO=Sybase,
Inc.;V=2.0;AS=A;MP=3120;CP=100;EGO=" \
...
```

If that line ends with a number immediately after a date, the client licenses are served. For example:

```
INCREMENT SUP_ENTCLIENT SYBASE 2011.11150 permanent 100 \
    VENDOR_STRING=PE=EE;LT=ST HOSTID=000c29d300bd
PLATFORMS="i86_n \
...
```

c) Determine the number of client licenses.

For unserved client licenses, the number of client licenses is the value of CP two lines below the line beginning with INCREMENT SUP_ENTCLIENT. For example:

```
INCREMENT SUP_ENTCLIENT SYBASE 2011.11150 permanent uncounted \
    VENDOR_STRING=PE=EE;LT=ST HOSTID=000c29d300bd
PLATFORMS="i86_n \
    x64_n" ISSUER="CO=Sybase,
Inc.;V=2.0;AS=A;MP=3120;CP=100;EGO=" \
...
```

For served client licenses, the number of client licenses is the value at the end of the line beginning with INCREMENT SUP_ENTCLIENT. For example:

```
INCREMENT SUP_ENTCLIENT SYBASE 2011.11150 permanent 100 \
    VENDOR_STRING=PE=EE;LT=ST HOSTID=000c29d300bd
PLATFORMS="i86_n \
...
```

CHAPTER 2   **Installing Sybase Mobile SDK**

Mobile SDK works closely with Unwired Server, but its installation is independent of the Unwired Server installation.

1. *Preparing for Installation*

   Ensure that the host on which you are installing Sybase Mobile SDK meets the system requirements and is ready for you to begin the installation.

2. *Entering License Information*

   Start the Sybase Mobile SDK installer and enter license information.

3. *Selecting Installation Options*

   Specify the installation directory and type of Mobile SDK you wish to install.

4. *Completing the Installation*

   Review the installation summary and launch the installation process.

5. *Protecting the Installation*

   Proper functioning of the Sybase Mobile SDK is critically dependent on specific versions of Eclipse components.

Preparing for Installation

Ensure that the host on which you are installing Sybase Mobile SDK meets the system requirements and is ready for you to begin the installation.

1. Verify that the target system meets the system requirements for Sybase Mobile SDK.

   See *Supported Hardware and Software*.

2. Verify that you have Administrator privileges on the installation target host.

3. If the *JAVA_TOOL_OPTIONS* environment variable is set, remove it before you start Unwired Platform installation.

   Check for the *JAVA_TOOL_OPTIONS* environment variable in both **User variables...** and **System variables** panels of the Environment Variables dialog.

   a) Right-click **My Computer** and select **Properties**.
   b) Select the **Advanced** tab, then click **Environment Variables**.
   c) Select *JAVA_TOOL_OPTIONS* and click **Delete**.
   d) Click **OK** to exit all dialogs.

Entering License Information

Start the Sybase Mobile SDK installer and enter license information.

1. Start the Sybase Mobile SDK installer using one of these methods:

    - Insert the Sybase Mobile SDK installation media.
    - Install from a Web download. Extract all the archive files to the same temporary directory on a local disk, not a shared drive.
    - Install from an image on the network. You must access the installation image from a mapped drive, not a UNC path.

    Browse to the location of the `setup.exe` file, and double-click it to start the installer.

2. On the installer welcome page, click **Next**.

3. Select your license model and click **Next**.

Evaluation	Allows you to evaluate Unwired Platform for 30 days. A license file is not required.
Unserved (local) license	Standalone license managed locally by the host.
Served (remote) license	Standalone license managed by a license server.

4. On the end-user license agreement page, accept the terms of the license agreement and click **Next**.

5. On the license details page, select your License Product Edition and License Type.

    (Enterprise Server edition only) Enter the number of client licenses.

6. Enter the location of your license file.

    - If you selected **Unserved (local) license**, enter the absolute path to the license file on the installation target host. The path must include only ASCII characters.
    - If you selected **Served (remote) license**, enter the **Host Name of License Server** and **TCP Port of License Server**.

    If you get an error, such as `Failed to check out license`, click **OK**, then click **Back** to confirm the license model (served or unserved), License Product Edition, and License Type.

Selecting Installation Options

Specify the installation directory and type of Mobile SDK you wish to install.
Specify the absolute path to the installation location on the target host.

Note: The installation directory must be on a local drive, on the target host.

The total length of the path must be 25 characters or less.

All directory names in the path must contain only:
- ASCII alphanumeric characters
- Underscore (_) or hyphen (-) characters

Completing the Installation

Review the installation summary and launch the installation process.

1. On the summary information page, verify the installation features and click **Install**.
2. (Optional) Click **View Release Bulletin**.
3. Click **Finish**.

For information about configuring Sybase Mobile SDK, see *Sybase Unwired WorkSpace - Mobile Business Object Development*.

Protecting the Installation

Proper functioning of the Sybase Mobile SDK is critically dependent on specific versions of Eclipse components.

This version of Sybase Mobile SDK uses specific versions of Eclipse components. These versions have been tested and found to work well with each other and with the Sybase Mobile SDK.

Note: Do not use the Eclipse update site to update any Eclipse plugins or contributed plug-ins like GMP, GEF, DTPs etc.

CHAPTER 3   **Upgrading and Migrating**

This section describes the steps to migrate artifacts (such as mobile applications, MBOs, packages, projects, etc.) that were working in version 2.0 of Sybase Unwired Platform to version 2.1.

Prior to Unwired Platform version 2.1, the component that was comparable to Sybase Mobile SDK was the Sybase Unwired WorkSpace development environment, which was installed by the Unwired Platform Runtime installer.

To upgrade your Sybase Unwired WorkSpace version 2.0.x development environment to Sybase Mobile SDK version 2.1, run the Sybase Mobile SDK installer on the system where Unwired WorkSpace 2.0.x is installed.

Upgrade and Migration Paths

Paths available to upgrade your developer environment and migrate version-specific artifacts.

The term "artifacts" refers to all the work that customer developers have done to create mobile applications on Sybase Unwired Platform. This includes (projects, packages, source code, and any other custom-created files.

Be sure that you upgrade your Unwired Platform servers at the same time that you migrate your Unwired Platform customizations. See *Installation Guide for Runtime*, "Upgrading and Migrating" chapter.

Current Unwired Platform Version	Unwired WorkSpace or Mobile SDK Upgrade
1.2	**Unwired WorkSpace Upgrade Tasks:** • Upgrade Unwired WorkSpace to 1.5.2 via fresh install in new location and manually copy files. Use 1.5.2 *Installation Guide*, "Performing a Custom Installation of Developer Edition" topic as a guide. **Artifact Migration Tasks:** 1. Manually copy 1.2 artifacts to 1.5.2 Unwired WorkSpace installation and open them in Unwired WorkSpace. Use 1.5.2 *Installation Guide*, "Migrating Sybase Unwired Platform Artifacts" topic as a guide. 2. Manually fix 1.5.2 issues not handled by opening artifacts in Unwired WorkSpace. Use 1.5.2 *Installation Guide*, "Upgrading and Migrating" chapter, as a guide – especially "Upgrading and Migrating" topic.

Current Unwired Platform Version	Unwired WorkSpace or Mobile SDK Upgrade
1.5.2 1.5.3 1.5.5	**Unwired WorkSpace Upgrade Tasks:** 1. Use 2.0 installer to upgrade Unwired WorkSpace to 2.0 – see 2.0 *Installation Guide*, "Installing Sybase Unwired WorkSpace Only" topic. 2. Use 2.1 Mobile SDK installer to install Mobile SDK 2.1. **Artifact Migration Tasks:** • For mobile applications that use a custom SAP® result checker, upgrade those applications to use JCo version 3 before you upgrade your production servers to Unwired Platform 2.1. See *Upgrading Applications that Use a Custom SAP Result Checker* on page 22.

2.0
 	
2.0.1
	Unwired WorkSpace Upgrade Tasks:
	
	• Use 2.1 Mobile SDK installer to install Mobile SDK 2.1.
	
	Artifact Migration Tasks:
	
	• After you have completed the upgrade of Unwired Platform servers and the Sybase mobile SDK, you must migrate the MBO projects before you attempt to redeploy the projects or generate code.
	  1. Import the exiting 2.0 project into 2.1 Unwired WorkSpace.
	  2. Right-click on the project and select **Open in Diagram Editor**.
	• For mobile applications that use a custom SAP® result checker, upgrade those applications to use JCo version 3 before you upgrade your production servers to Unwired Platform 2.1. See *Upgrading Applications that Use a Custom SAP Result Checker* on page 22.

2.1	**SDK Upgrade Tasks:** • Not applicable

Native Client Version Compatibility Matrix

This shows compatibility between versions of the client object API and Unwired Server.

Native Client Object API and Unwired Server Version Compatibility

	Unwired Server 1.2	Unwired Server 1.5.x	Unwired Server 2.0.x	Unwired Server 2.1
Native Client Object API 1.2	YES	NO	NO	NO

	Unwired Server 1.2	Unwired Server 1.5.x	Unwired Server 2.0.x	Unwired Server 2.1
Native Client Object API 1.5.x	NO	YES	YES	YES
Native Client Object API 2.0.x	NO	NO	YES	YES
Native Client Object API 2.1	NO	NO	NO	YES

Hybrid Web Container Version Compatibility Matrix

This shows compatibility between versions of the Hybrid Web Container and Unwired Server and Hybrid Web Container and Mobile Workflow applications.

Hybrid Web Container and Unwired Server Compatibility

	Unwired Server 2.0	Unwired Server 2.0.1	Unwired Server 2.1
Hybrid Web Container 2.0	YES	YES	YES
Hybrid Web Container 2.0.1	NO	YES	YES
Hybrid Web Container 2.1	NO	NO	YES

Hybrid Web Container and Mobile Workflow Application Compatibility

	Mobile Workflow Application 2.0	Mobile Workflow Application 2.0.1	Mobile Workflow Application 2.1
Hybrid Web Container 2.0	YES	NO	NO
Hybrid Web Container 2.0.1	YES	YES	NO
Hybrid Web Container 2.1	YES	YES	YES

Migrating Mobile Workflow Projects

Mobile workflow projects work properly without special handling, unless you want to upgrade to the new workflow client containers.

After upgrading to SDK version 2.1:

- Mobile workflows developed in version 2.0 and 2.0.1 must be regenerated and repackaged using the Mobile Workflow Forms Editor to use the new 2.1 functionality. The new functionality is included as additions and modifications to the JavaScript files.
- Any customizations made in version 2.0 and 2.0.1 to the `Custom.js` and `Stylesheet.css` files in the mobile workflow package are maintained and functional after regenerating and repackaging.
- Any customizations made in version 2.0 and 2.0.1 of the `API.js`, `Utils.js`, or `WorkflowMessage.js` files in the mobile workflow package are backed up (to a .backup extension) the first time the mobile workflow package is generated in 2.1., then they are replaced with the new 2.1 version. If you made changes to those files in 2.0 or 2.0.1, you must manually reapply those changes.
- Mobile workflow packages generated in version 2.0 and 2.0.1 do not work with version 2.1 of Unwired Server unless you manually modify the `manifest.xml` file to reference the shared `WorkflowClient.dll` file located in `<UnwiredPlatform_InstallDir>\UnwiredPlatform\Servers\MessagingServer\Bin`.

Supported Upgrade Scenarios
When Unwired Server is upgraded from version 2.0 or 2.0.1 to version 2.1, no modifications to the deployed version 2.0 mobile workflow packages on the server or clients are necessary for the version 2.0 or 2.0.1 functionality to operate correctly.

When SDK clients are upgraded from version 2.0 or 2.0.1 to version 2.1, version 2.0 and 2.0.1 are coexistent installation with 2.1 on BlackBerry and Windows Mobile platforms. Workflow messages and existing version 2.0 mobile workflows remain on the clients. Native applications continue to use version 2.0 or 2.0.1 binaries and settings.

Android
If the 2.1 Android mobile workflow container is installed on an Android device in which the 2.0.1 Android mobile workflow container is already installed:

- The 2.1 container upgrades and replaces the 2.0.1 container.
- Existing mobile workflows and messages stay intact and are automatically mapped to the 2.1 mobile workflow container.
- No new registration or re-registration is required on Unwired Server, nor do you need to reassign mobile workflows to the 2.1 mobile workflow container.

BlackBerry

If the 2.1 BlackBerry mobile workflow container is installed on a BlackBerry device on which the 2.0 BlackBerry mobile workflow container is already installed:

* The two mobile workflow containers coexist on that BlackBerry device or simulator.
* The existing mobile workflow applications and messages remain tied to the version 2.0 or 2.0.1 container and are NOT removed.
* A new application connection on Unwired Server is required for the 2.1 container, mobile workflows must be assigned to the 2.1 container, and the connection settings must be entered in the 2.1 Settings application.
* When the 2.1 container is installed, an additional Workflow menu item will NOT be added to the Messages application. The existing Workflow menu item in the Messages application maps to the 2.0 Container. If the 2.1 BlackBerry client is the only version of the workflow container running on the device, the Workflows menu item is mapped to the 2.1 BlackBerry client.
* The new 2.1 Workflow Container application icon must be used to launch the 2.1 Container. Workflow messages in the inbox will open whichever container version they are associated with.

iOS

If the 2.1 mobile workflow container is installed on an iOS device on which the 2.0 or 2.0.1 iOS mobile workflow container is already installed:

* The version 2.1 mobile workflow container upgrades and replaces the 2.0 or 2.0.1 container.
* Existing mobile workflow applications and messages stay intact and are automatically mapped to the 2.1 container.
* No new registration or re-registration of application connections is required on Unwired Server, nor do mobile workflows need to be reassigned to the 2.1 container.

Windows Mobile

If the version 2.1 mobile workflow container is installed on a Windows Mobile device on which the 2.0 or 2.0.1 mobile workflow container is already installed:

* The two mobile workflow containers coexist on that Windows Mobile device or emulator.
* The existing mobile workflow applications and messages remain tied to the version 2.0 or 2.0.1 mobile workflow container and are NOT be removed.
* A new application connection on Unwired Server is required for the 2.1 container, mobile workflows must be assigned to the 2.1 container, and the connection settings must be entered in the 2.1 Settings application.
* When the 2.1 container is installed, and a version 2.0 or 2.0.1 installation is present, an additional Workflow menu item is NOT added to the menu in the mail application. The

existing Workflow menu item in the Messages application maps to the 2.0 or 2.0.1 container.

- You must use the new 2.1 Workflow container icon displayed in **Programs** to launch the 2.1 container.
- Workflow messages in the inbox will open whichever container version they are associated with. If 2.0 or 2.0.1 and 2.1 are assigned the same workflow and have messages sent to the user, two emails are sent – one for each registration.

If previous versions are not installed at the time 2.1 is installed, the mail menu item **Workflows** is created and can be used to access the 2.1 Workflows application. No special handling is present if a mobile workflow container 2.1 is installed on the device or emulator first, and a 2.0 2.0.1 mobile workflow container installed subsequently. One possible result is that there may be two mail menu items named **Workflows**.

The Windows Mobile Programs folder will have icons for accessing both 2.0, 2.0.1, and 2.1 settings. Versions 2.0 and 2.0.1 icons and names will remain. For 2.1, two new icons will be present—**Workflow Settings** for the 2.1 settings application and **Sybase Mobile Workflow** for the 2.1 workflow application.

Migrating DOE-C Packages

When you migrate DOE-C packages from Unwired Platform 2.0 to 2.1, you must change the securityConfiguration option.

In Unwired Platform version 2.0, the default value for `securityConfiguration` "admin" option was `Authentication=NoSecLoginModule`. In Unwired Platform version 2.1, the default value for "admin" is `Authentication=PreConfiguredUserLoginModule`,

When migrating DOE-C packages from Unwired Platform version 2.0 to version 2.1, you must use a new `securityConfiguration` option, `DOECNoAuth`, with default value of `Authentication=NoSecLoginModule`.

Upgrading Applications that Use a Custom SAP Result Checker

SAP custom result checkers must be upgraded to use JCo version 3.

1. In your test environment, install or upgrade to Unwired Server version 2.1 and install Sybase Mobile SDK.
2. Copy onto this system the mobile application project that contains the source code below for the custom SAP result checker.

```
import com.sap.mw.jco.JCO.Function;
import com.sybase.sup.sap.SAPResultChecker;
public class jcov2checker implements SAPResultChecker {
     public Entry<Boolean, String> checkReturn(Function arg0) {
     ...;
          }
}
```

3. Modify the source code for the custom SAP result checker to use JCo version 3, as shown below.

```
import com.sap.conn.jco.JCoFunction;
import com.sybase.sup.sap3.SAPOperationHandler;
public class jco3Rcheck extends SAPOperationHandler {
        public void resultCheck(JCoFunction f) {
     ...;
          }
}
```

4. Package and deploy the project, and verify that the custom SAP result checker updated to use JCo version 3 works correctly.

Next
If the mobile application is to go into production, provide the Unwired Platform system administrator with the package lib\jar file that you upgraded to use JCo version 3.

CHAPTER 4 **Uninstalling**

Uninstall Sybase Mobile SDK using the Control Panel option to remove programs, which launches the uninstaller.

Prerequisites

Before you uninstall Sybase Mobile SDK:

* Shut down Sybase Unwired WorkSpace.
* Back up any user-created files and log files you want to keep from the installation directories to another location.

Task

1. From the Control Panel, begin removing the program.
   This starts the uninstaller.
2. Click **Next** in the welcome window.
3. Click **Finish** when you see:
   ```
   The InstallShield wizard has successfully uninstalled
   Sybase Mobile SDK <version>.
   ```

CHAPTER 5   **Troubleshooting**

Determine the cause of common problems and apply the recommended solution.

End-to-End Encryption and HTTPS Options Not Configured Correctly after Upgrade

Problem: End-to-end encryption (E2EE) and HTTPS settings are not retained in the upgrade to version 2.1.

Explanation: If the version 2.0 Sybase Unwired Server had E2EE and HTTPS options configured, after upgrading to 2.1, E2E Encryption Public Key and Secure Sync Port Public Certificate are empty. These fields need to be manually configured.

Workaround: Use Sybase Control Center to manually configure these same settings. See *Sybase Control Center*, "Configuring a Synchronization Listener" and "Security Settings" topics.

Workflow Deployment Fails with SoapException

Problem: After migration, a workflow deployment may fail with a SoapException error.

Explanation: Occasionally a migrated workflow application fails with a SoapException error.

Workaround: Just rev the module version number that is displayed on the **Flow Design** page, **General** tab.

CHAPTER 6   **Obtaining Help and Additional Information**

Use the Sybase Getting Started CD, Product Documentation site, and online help to learn more about this product release.

- The Getting Started CD (or download) – contains release bulletins and installation guides in PDF format, and may contain other documents or updated information.
- Product Documentation at *http://sybooks.sybase.com/* – is an online version of Sybase documentation that you can access using a standard Web browser. You can browse documents online, or download them as PDFs. In addition to product documentation, the Web site also has links to EBFs/Maintenance, Technical Documents, Case Management, Solved Cases, Community Forums/Newsgroups, and other resources.
- Online help in the product, if available.

To read or print PDF documents, you need Adobe Acrobat Reader, which is available as a free download from the *Adobe* Web site.

Note: A more recent release bulletin, with critical product or document information added after the product release, may be available from the Product Documentation Web site.

Documentation Roadmap for Unwired Platform

Sybase® Unwired Platform documents are available for administrative and mobile development user roles. Some administrative documents are also used in the development and test environment; some documents are used by all users.

See *Documentation Roadmap* in *Fundamentals* for document descriptions by user role. *Fundamentals* is available on the Sybase Product Documentation Web site.

Check the Sybase Product Documentation Web site regularly for updates: access *http://sybooks.sybase.com/nav/summary.do?prod=1289*, then navigate to the most current version.

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