

## Synthesis SyncML Client for Windows Mobile 5, Windows Mobile 2003 (SE/PE) PocketPC 2003 and PocketPC 2002 (with Touch Screen)

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### 2. Introduction

Synthesis SyncML Client for PocketPC allows using PocketPC / Windows Mobile based PDAs and Smartphone-PDAs (= devices with Touch Screen) synchronize with servers that support the platform and vendor independent synchronization protocol SyncML (also known as OMA DS).

### 3. Product Variants

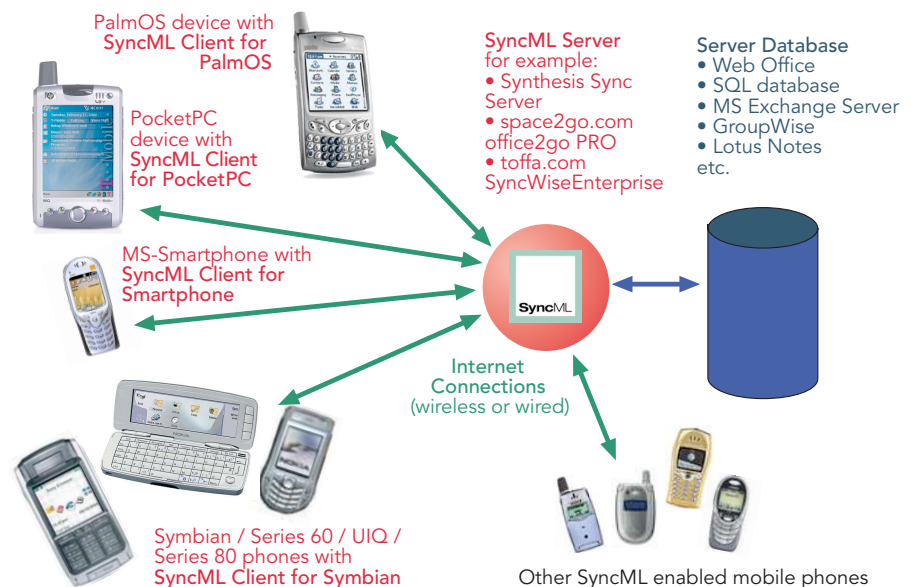
Synthesis SyncML Client is available for different mobile platforms and in two different basic variants, **STD** and **PRO** (This manual describes both variants, differences are marked with appropriate **labels**). The following matrix shows the differences:

	PocketPC		Smartphone		PalmOS		Symbian	
Feature	STD	PRO	STD	PRO	STD	PRO	STD	PRO
Contacts Sync	✓	✓	✓	✓	✓	✓	✓	✓
Events/Tasks Sync	✓	✓	✓	✓	✓	✓	✓	✓
Email Sync		✓		✓		✓		✓
w/Attachments		✓		✓				✓
Notes Sync					✓	✓		
Multiple Profiles		✓		✓		✓		
Secure HTTP (SSL)	✓	✓	✓	✓	✓	✓	✓	✓
AutoSync/PUSH/DMU		✓		✓				✓
gzip compression		✓		✓				✓

## 4. SyncML Synchronization Overview

With Synthesis SyncML Clients you can synchronize the contacts, events and tasks stored on your mobile devices with any SyncML compliant server - over the internet.

- SyncML breaks the barriers between mobile devices from different manufacturers.
- SyncML also unchains your mobile device from extra software installed on a specific PC. Sync your data from wherever you are - over the air!
- SyncML allows Palms, PocketPCs, Smartphones (Windows and Symbian based), desktop computers and mobile phones to be kept in sync with a single server.
- Any event you enter into your PDA will be available on your mobile phone. Any new phone number you save on your mobile phone will be transferred to your PDA, second mobile phone, your desktop computer etc. as well.



## 5. How to get the PocketPC Client Software

Synthesis SyncML Client for PocketPC is available only as a download from the internet. There is no boxed product nor printed documentation (but we provide this document in nicely formatted PDF so you can print it on paper if you want to).

Please download the latest version from our website at <http://www.synthesis.ch>.

Note that there are two different downloads for **STD** or **PRO** version (see first page for differences between STD and PRO), and eventually also further options for localized versions of the software.

You can download the software (including the latest version of this documentation) for free. It will run in evaluation mode for 30 days (counting from the date you first use it). After this free evaluation period, in order to continue using the software, you need to buy a license. You can do so on-line (see "buy at Kagi now" links on our website). After buying a license, you will receive a registration code by email. Entering this code will remove the 30 day limit from the software.

See paragraph on "registering the software" below for details.

## 6. How to get a SyncML Server account

In order to sync via SyncML, you need to have an account with a SyncML compliant server. Most mobile office services (web offices) will offer SyncML in the near future, and some do already. For enterprises, solutions exist to bring Exchange or Lotus Notes hosted data on-line with SyncML. A few examples:

- Our strategic partner space2go.com (<http://www.space2go.com>) provides the office2go PRO service for only EUR 32/year including full SyncML synchronization (contacts, events, tasks and - **PRO only** - emails).  
space2go.com also provides a solution called enterprise2go which makes data on Exchange and Lotus Notes available for SyncML clients (as well as for WWW and WAP browsers).
- Toffa (<http://www.toffa.com>) provides a solution called SyncWiseEnterprise which makes GroupWise data available for SyncML clients.
- The Oracle Collaboration Suite (OCS) from Oracle (<http://www.oracle.com/collabsuite>) provides SyncML synchronization.
- If you have a custom application based on a SQL database, you can also install Synthesis SyncML Server (fully functional demo can be downloaded at <http://www.synthesis.ch>) at your site.



Note that any of the solutions above also allow syncing with many other SyncML enabled devices, such as Siemens S55, S65, SX1; SonyEricsson T39m, T68i, T615, T610, T630, P800, P900, P910; Nokia 9300, 9500, 9210, 7650, 7250, 6600 6800, 3650, 3300 and many others!

## 7. Requirements

To use SyncML client for PocketPC 2002 / Windows Mobile, you need the following:

- A user account in a SyncML Server (see 3. above)
- A handheld computer or smart phone based on PocketPC 2002, PocketPC 2003, Windows Mobile 2003 (SE/PE) or Windows Mobile 5 **with a touch screen**. Note that there are "smart phones" without a touch screen based on the MS Smartphone platform - these will need our SyncML client for MS Smartphone and will not work with the PocketPC version.
- A means to connect the device to the internet. Recent devices have built-in wireless access to the internet, others connect to the internet using a modem or a wireless mobile phone. Please refer to your device's documentation for instructions how to set-up an internet connection.



## 8. Installation

Installation is very easy. Simply copy the appropriate \*.CAB file (the 2002 for PocketPC 2002, the WM (Windows Mobile) version for PocketPC2003, Windows Mobile 2003 (SE/PE) or Windows Mobile 5, according to your device) to your PocketPC and install it. There are two ways to do that:

- Directly download the \*.CAB from our web server (or any other web server where this file is available) with Pocket Internet Explorer. Installation will start automatically.
- Copy the \*.CAB to your PocketPC using ActiveSync. This is done with the following steps:
  1. Connect the PocketPC to your desktop PC, open ActiveSync on the desktop PC and click the "browse device" button.
  2. An explorer window opens showing the files on your PocketPC.
  3. Drag the \*.CAB file to this window - it will be copied to the PocketPC.
  4. Now on the PocketPC, open File Explorer (Start>Programs>File Explorer). You should now see the copied \*.CAB file. Tap it once and it will be installed.
  5. NOTE: DO NOT TRY TO INSTALL THE 2002 VERSION ON A 2003 or Windows Mobile 5 DEVICE OR VICE VERSA - IT WILL NOT FUNCTION PROPERLY!

After Installation, you will find an application "Synthesis SyncML" in your start menu with an icon like this:



## 9. Basic Setup

Start the "Synthesis SyncML" application by selecting it from the start menu.

It will show its main screen as shown on the right:

**PRO only:** The "Autosync" checkbox is used to globally enable or disable automatic (unattended) synchronization features. See Chapter "Autosync" below for details.

**PRO only:** The "Profile" popup menu allows to select between different profiles. You can keep your PDA in sync with multiple SyncML servers without the need to change any settings. **Note that multiple profiles for the same server are not recommended, as this might lead to duplicates!**

When first started, there is only a single profile called "Default Profile". You can change it's name to something more meaningful for you.

Tapping on the icon in the "Synchronization" box will start synchronization later, however you need to enter your SyncML server's settings first.

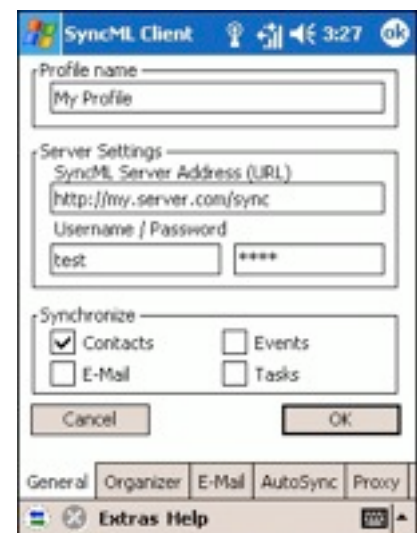
To to that, select "Profile Settings..." (**PRO**) / "Settings..." (**STD**) from the menu.

This will open the settings screen.

Please provide the following values:

- **PRO only: Profile name:** You can give the profile (especially if you have multiple profiles) a meaningful name.
- **SyncML Server URL:** This is the internet address of your SyncML service. Your SyncML service provider will inform you what needs to be entered here. Of course, if you have set-up a SyncML server of your own (for example the free Synthesis Demo Server) you can enter it's URL here.

Note that since Version 2.5 both STD and PRO support secure connections with SSL/HTTPS (before 2.5, only



PRO supported SSL) - simply use https:// instead of http:// to start the Server URL.

- **User and Password:** This is how you login to the SyncML service. Normally, SyncML user and passwords are the same as for accessing the service via the web (for the Synthesis Demo Server user and password are both "test").

In the "synchronize" box, you can quickly select or deselect the data you want to be synchronized. Please note that before syncing the first time, you should also consult the "Organizer" and (**PRO only**) eventually "email" tab of the settings which contain a few more details for each of the data types.

To change detail settings for contacts, events and tasks, please tap on the "Organizer" tab at the bottom of the settings screen.

The "Organizer" tab provides the following settings for each of the three organizer data types that can be synchronized:

- **Server Path:** This is how the database is called at the server's end. Synthesis SyncML client for PocketPC shows default values here ("contacts", "events", "tasks" and - **for PRO only** in the E-Mail tab - "emails") which are widely used for SyncML servers, so in many cases you don't need to change these. However, some servers need different names here - please refer to setup instructions from your SyncML provider. Some servers (such as those based on our server engine) allow some extra options to be specified in addition to the server DB name. Note that such options are server specific, so please refer to your SyncML service provider's instructions to see if such extras are supported.
- **Sync Mode:** This is mostly automatic, you seldom need to change this setting. For initial sync with a server, a "slow sync" automatically occurs. For subsequent syncs with the same server, "normal sync" mode will be used. A "slow sync" is called slow because it includes that all data is sent from the device to the server which can take some time. The server takes an inventory of the device's data, so it'll be able to use "normal sync" (only changes are transferred, which is of course much faster) in subsequent syncs. Thus, in an ideal world, there would be no need for further slow syncs. However, as mobile internet connections are not ideal, that is, they sometimes are interrupted in mid-





sync, slow sync is also used to re-synchronize after a failed synchronization. Note that this happens automatically, so you don't need to change the mode to slow sync yourselves.

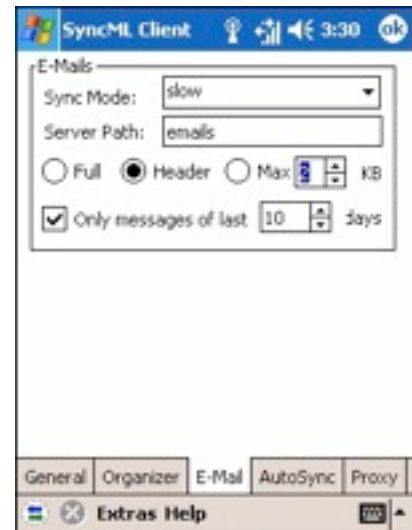
In addition to "normal" and "slow" as described above a few extra sync modes are supported:

- **Update Device:** This is like "normal" sync, however only the device will be updated with changes from the server - the data on the server will NOT be changed at all.
- **Reload Device:** This is a special "slow" sync as follows: First, all data on the device will be erased, then, all data from the server will be copied to the device. This is a good mode to restore a device which has accidentally modified or deleted data on it. As this involves losing all data that was not previously saved on the server, a warning message will be shown when you start syncing in this mode.
- **Update Server:** This is like "normal" sync, but only changes made on the device will be sent to the server. The data on the device will NOT be changed at all. Note that this mode does not work with all SyncML servers (server must support "one way sync from client mode")
- **Reload Server:** This is the opposite of "reload device" and works as a special "slow" sync as follows: First, all data on the server will be erased, then, all data from the device will be copied to the server. Note that this mode does not work with all SyncML servers (server must support "refresh from client mode")
- **Only from:** For Events, you can limit the date range of events that are synchronized. Note that this does not work with every SyncML server, so if you encounter problems synchronizing events, just switch this option off.



**PRO only:** The "E-Mail" tab provides similar settings as in the "Organizer" tab for synchronizing e-mail. Note that e-mail sync is not supported by many servers yet, and if it is supported, most probably the advanced settings for limiting email size will not work except with servers from Synthesis AG (space2go, ONE, sunrise OfficeSync, my-siemens). If you have problems synchronizing email, try syncing with the "Full" radio button enabled.

Email received with SyncML will appear in the Inbox application in the "SyncML" message store. To have emails sent via SyncML, you must create them in the SyncML message store. You can make the SyncML message store default by selecting it from Inbox's "Services" menu.

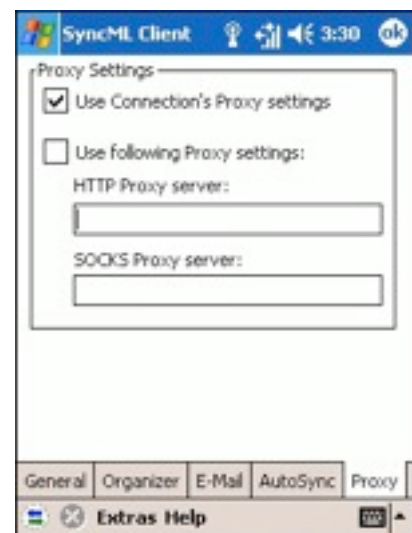


## 10. Proxy Settings

In most cases nowadays, direct connection to the internet is possible from a mobile device, and proxy servers, if any, are made transparent (invisible to the end user).

However, in case your environment requires that a proxy server is used to access the SyncML server, check the proxy settings (select the Proxy tab in the settings screen):

- Use Connection Proxy Settings:** Check this if you want to use the Proxy settings that are configured in the system's connection settings.  
**Note:** Make sure that only the HTTP proxy is set in the PocketPC system wide proxy settings (in Start Menu → Settings → Connections) when you don't have other types of proxy servers, using the "Advanced..." proxy settings. If you only enter the proxy settings without detailing it in "Advanced...", the same proxy server will be used for HTTP and SOCKS, which is usually not working as expected.
- Use following Proxy Settings:** Check this when you want to specify your own proxy settings for accessing the SyncML Server (for example in case the SyncML server needs a proxy different from what is used for other services).





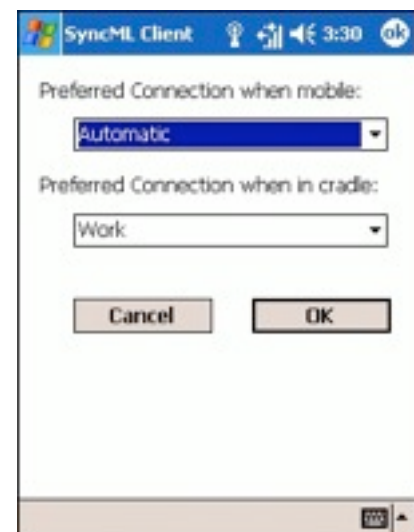
- **HTTP Proxy server:** This is the IP address or name of the HTTP proxy server, followed by a colon, followed by the port number, such as 123.45.67.89:8080
- **SOCKS Proxy server:** This is the IP address or name of the proxy server, followed by a colon, followed by the port number, such as 123.45.67.89:3701. Leave it empty if you do not have a SOCKS proxy server that must be used to reach the HTTP proxy.

## 11. Connection Settings

Usually, connection management is automatic - the operating system chooses the appropriate connection (cradle, network card, wireless). However, in some cases this does not work as expected.

To open the connection settings, select "Connection Settings..." from the menu.

In the screen that shows up, you can define which connection is used when the device is in the cradle (connected with a desktop via ActiveSync) and which connection is suitable for mobile operation. The default is to set both to "automatic".



## 12. Synchronizing

When setup is complete, you can select the data to be synchronized using the checkboxes and start synchronization simply by tapping onto the icon with the two arrows in the middle (You can also tap on the small icon in the toolbar).



That's it - everything else will happen automatically (like with ActiveSync):

- The PocketPC will open a connection to the internet to communicate with the SyncML server. It uses the PocketPC's network and connection settings. So if the connection fails, review your network and connection settings and refer to your mobile internet provider's information about details.
- Data will be synchronized. The main screen will show some progress information, such as how many items (contacts, events, tasks, and - **PRO only** - emails) are sent and received.
- Finally, the screen should read "successfully completed" and "Last Sync" will show the current date and time.

- **PRO only:** When email has been received during the synchronization, a small envelope icon will appear in the status bar at the top of the screen.



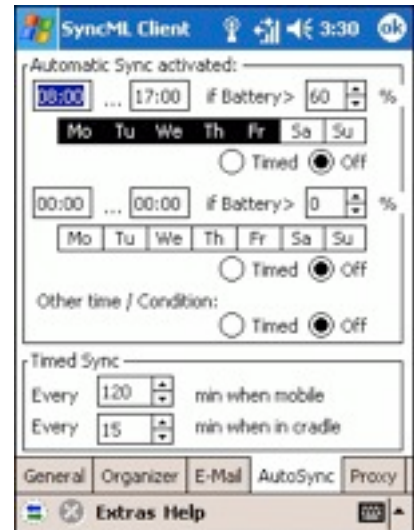
### 13. AutoSync + Push/DMU

**PRO only:** The PRO version has a feature called "AutoSync". This means that it can automatically start an unattended synchronization under certain conditions. With **Push/DMU** enabled servers and an appropriate license (see below), true **email-push** is possible!

To view and change the Autosync settings, select the "AutoSync" tab in the settings screen. It looks like shown on the right.

There are two main blocks of settings:

- The "Automatic Sync activated" box determines if and under what conditions automatic synchronization takes place at all.
- The "Timed Sync" box determines how often automatic sync takes place in the periods when the conditions in the "Automatic Sync activated" box are met.



The "Automatic Sync activated" settings work as follows: There are two identical groups of conditions, each consisting of

- A **time of day range**, such as 8:00 ... 17:00. Note that it is possible to specify ranges such as 22:00 ... 5:00 as well, this would mean through the night from 10 pm to 5 am. For 24 hour all-day syncing, specify 0:00...0:00 or 0:00...24:00.
- A **list of weekdays**. Select those days when you want to have automatic sync active.
- A **minimal battery charge level**. This is useful to prevent unattended syncing to drain the battery of the device. To allow automatic syncing only when the device is connected to a power supply, set the charge level to 100%. To allow automatic syncing regardless of the battery level, specify 0%.

For each of the condition groups, you can select what should happen when the condition is met with a row of radio buttons (A third row of these buttons are available to specify what should happen when none of the conditions are met):

- **Off** means that no automatic synchronization takes place.
- **Timed** means that the device will automatically synchronize in the intervals specified in the "Timed Sync" box (see below).
- **Push (DMU):** This option is available only when you have a **DMU-enabled license**. DMU means "Direct Mobile Update" and is a true **Push** technology developed by space2go.com and Synthesis. With Push/DMU enabled, SyncML servers that support DMU (currently so-

lutions from space2go.com and Toffa.com do this) can initiate a synchronization, whenever a change occurs on the server. With email, this provides true **email push** experience - emails sent to your account will immediately be transferred to your mobile device.

When DMU is enabled for the first time, one sync session is required to establish the Push/DMU functionality.

Please contact your SyncML solution provider to find out if DMU is supported and to obtain DMU-enabled license for the Synthesis SyncML clients.

To enable Autosync activities, the "Autosync" checkbox on the main screen of the software must be checked, otherwise Autosync is disabled regardless of the other settings made. Next to the checkbox, the current Autosync status will be shown:

- **inactive:** Autosync is not active, either because the checkbox is unchecked or because none of the conditions (time, weekday, battery) specified in the settings are met.
- **at 3/9/2005 - 16:03:01:** Timed Autosync is active, the next time when a timed synchronization will take place is shown.
- **waiting for activation:** Push/DMU is enabled, but a manual sync session is needed to activate DMU.
- **Push (DMU):** Push/DMU is active - as soon as there is new data (usually email) on the server, a sync session will automatically start. Note that it is not relevant which data is selected for synchronization - DMU will automatically select those data types for which there is new information to transfer.
- **off, low battery:** Autosync is inactive because the battery charge is below the level specified in the settings.
- **off, no phone:** Autosync is inactive because the phone is switched off and there is no other way available to connect to the DMU server.
- **Syncing now...:** an automatically started synchronization is currently running.



When new email is received during a sync session, a small envelope icon will be shown in the status bar (even when the SyncML client is operating in the background). Just tap this icon to open the E-Mail application.



Note: While Autosync is enabled with the checkbox on the main screen, the SyncML client application cannot be terminated - even if the main screen is closed, it will only be sent to the background, but the program continues to run. To explicitly terminate the program, disable Autosync first and then close the main window.

## 14. Registration

The Synthesis SyncML Client for PocketPC which you can download for free from our website initially runs only for 30 days after the first use.

At the bottom of the main screen you see how many days are remaining of the trial period. After these 30 days, you must register the software, that is, buy a registration code.

For immediate on-line purchase of licenses (for other possibilities to obtain a license see note below) we provide a web store at Kagi, which is linked from our website or can be directly reached at the following URL:

<http://order.kagi.com?L3U>.

Note that the **entire purchase and payment process is handled by Kagi**, a company specialized in processing orders for software registration for many years. Kagi offers secure processing for all major credit cards, check, money order and even cash payment and also collects VAT when applicable. **Please always contact Kagi in case of purchase or payment questions, including VAT issues.**

In the Kagi online store, please make sure you order a registration code for the correct product:

Synthesis SyncML Client **STD** or **PRO** for **PocketPC**

(as the same page also offers codes for other products of Synthesis AG).

Within a few hours (usually only minutes) after your payment, you will receive an email containing your registration code.

Please start SyncML Client on your PocketPC, choose "Registration..." from the menu and enter the information given in the email (your name, your email address and a code looking like AH6T-5GHU-MZ5O-L2RU).

### Notes:

- Enter your name and email as one line of text **exactly as shown in the registration email, including character case**. You may enter extra spaces, but no other extra characters.
- Note that an O in the code is always the character "O" (Oh) and never the digit "0" (zero). Make also sure that you don't mix digit "1" and letter "i" or "L".



The screenshot shows a dialog box titled "SyncML Client" with a status bar at the bottom showing "10:09" and a battery icon. The main text inside the dialog says: "Please enter Registration Details: (you can register on-line at www.synthesis.ch or order.kagi.com?L3U)". Below this text are two input fields: "Name and e-mail address:" and "Registration code:". At the bottom of the dialog are two buttons: "Cancel" and "OK".

If the data you entered is correct, your name will be displayed at the bottom of the main screen and the software will continue to work without any time limit.

If the registration information is rejected, please check

- Is the name and email address entered exactly as shown, including character case, on a single line?
- Is the code entered correctly?
- Was the license purchased for the right platform (**PocketPC**) and the right version (**PRO** codes will work with **STD** version software, but **STD** code only works with the **STD** version software)

Please keep the registration code in a safe place, in case you need it again when re-installing the software after a hard reset of your PocketPC device.

The registration will remain valid for future updates for the same version of the software.

**Please note:** some of our partners and re-sellers are selling these license codes under their own terms, for example **DMU-enabled** licenses bundled with DMU-enabled server software or services. Some organizations or companies may also have negotiated special conditions for buying license codes.

In case you intend to buy a large number of licenses or want to become a re-seller yourselves, please contact us at [sales@synthesis.ch](mailto:sales@synthesis.ch) for details.





## 15. Troubleshooting

If your connection to the internet is stable - synchronization should be no problem. Just start a synchronization whenever you want to update your data.

Still, there are a few possible problems, mostly caused by interrupted sync sessions.

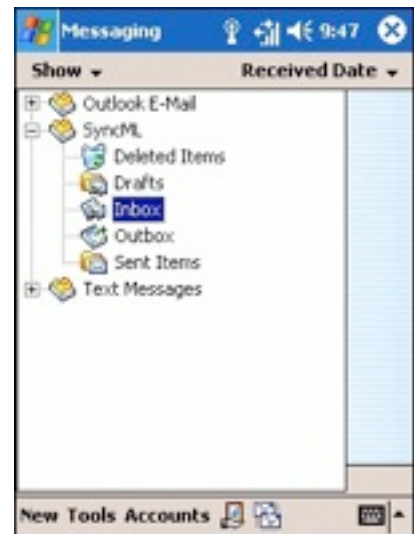
- **Synchronization aborts with error code:** See error code explanation in next chapter for details.
- **Registration does not work:** Please make sure that...
  - name and email address is entered exactly as shown, including character case, on a single line.
  - the code is entered correctly ("O" is always letter "o" and not digit zero; also make sure not to mix up digit one "1", letter "L" and letter "i").
  - the license purchased is for the right platform (**PocketPC**) and for the right version (**PRO** codes will work with **STD** version software, but **STD** code only works with the **STD** version software).
- **Strange behavior in general:** If it seems to you that your data is not synchronized as it should, it is a good thing to make a fresh start. SyncML is an incremental method - which means that the things that happened in the past synchronizations influence what will happen in future synchronizations. This is a good thing (saves a lot of time) under normal circumstances, but sometimes this dependency on the past sometimes is replicating old problems. To make a new starting point, make sure you have all recent data stored on the server and then set the sync mode to "reload device". This will cut all dependency on past synchronization problems.  
**PRO only:** In case of persisting problems with email, it might also help to delete the "SyncML" service (go to Inbox, select Tools->Options, select "SyncML" from the list and then tap the red cross at the bottom of the screen. This will remove all mail you received/sent via SyncML. Then do a "reload device" sync for email.
- **Sync always takes a long time:** Most probably, the previous synchronization did not complete successfully, so a slow sync occurs. If this happens all the time, this indicates either a very poor quality of the internet connection or a compatibility problem with the server used. If you need to report the problem to the SyncML service provider, please include date and exact time of the failing sync attempt(s), username, and also the error message displayed at the end of the synchronization in your report. Without this information, it is difficult for the service provider to track down the problem.
- **Duplicates:** In some cases you might notice that some of your data gets duplicated. If this happens only for a few contacts, this is perfectly normal, it shows that a record has been modified on your device and on the server in parallel. In order not to lose either modification, the server has decided to keep both versions of the record so

you can decide which version is the "right" one. Just delete the version that is obsolete on the device or on the server.

If you encounter a lot of duplicates without having modified anything, this indicates a compatibility problem with the server used.

Please note that if you cannot successfully complete a synchronization, the probability of getting duplicates is slightly higher as there might have been problems in the previous synchronization.

- **Missing fields:** If you think that you don't get all data stored on the server or vice versa, not all server fields get update with data you have on your mobile device - please consider that this might be perfectly normal. Why? Unlike proprietary synchronization technologies such as HotSync and ActiveSync, SyncML is an open standard which allows synchronizing any compliant device with any compliant server. However, not all servers and not all devices support the same set of data fields. A mobile phone is likely to support only telephone numbers, but no street address. Or some devices are restricted to one address per contact, while others support separate work and private addresses. This might be confusing on the first sight, but a properly set-up server will be smart enough to preserve your data even if there is no exact 1:1 mapping possible.
- **PRO only: Where is my email?** The Inbox application on the device has multiple accounts. Email delivered via SyncML is stored in a separate account named "SyncML". To view it, open the Inbox/Messaging application (from the Start Menu), then select the drop-down menu in the grey header bar at left to open the accounts and folder tree. Here you should see a "SyncML" entry with its own Inbox, Outbox and other standard folders. Please note that in order to send email via SyncML, you must create new messages in the SyncML outbox.



**Please note:** In most cases, the problems are specific to the SyncML service provider's environment. Therefore, please first ask your service provider in case of problems and mention that you use Synthesis client software. The service provider will then be able to analyze the problem and will contact us directly in case they think the problem is in our client software.

To report a bug or a problem (to the SyncML service provider or to us), please collect the following data before reporting a problem to Synthesis AG

- Version of the Software (please choose "About SyncML client..." from the main menu to find out the exact version number, such as 2.5.0.20)
- URL of the server you are using to synchronize with.
- Error messages shown by the software.
- As the problem needs to be tracked down together with the SyncML service provider, please include your user name you used to login to the SyncML service and the exact date and time when you tried to synchronize.

You can contact us at [support@synthesis.ch](mailto:support@synthesis.ch) for support issues. Suggestions or ideas for enhancing the product are also welcome!

## 16. Error messages and error codes

### Config incomplete/bad

This message is shown when trying to start a sync session while missing configuration information.

The reason for this message could be missing server URL, missing server paths of the individual data stores, no database selected for sync at all, or database to sync with is not available on the device (for example, corrupted Contacts or calendar database on the device)

### Demo/License Expired

This means that either the free trial period of 30 days (counted from the first time the software is used) is over or the temporary license code you were using has expired. You need to buy a permanent license or obtain a new temporary license (usually granted by our resellers and Synthesis for evaluation and piloting) to continue using the software (see chapter "registration").

### License not valid here

This message means that your license, although basically valid, cannot be used with this server at this time.

This can be the case for licenses that are restricted to a certain type of server or to a certain server URL (those licenses have a double colon followed by some server specification in the license text like "::u=\*my.domain.com/sync" or "::t=servertype").

Another reason for this message can be if the license is already in use by more devices than allowed (e.g. a 5 user license being used on 7 devices).

### Connection error

This means that the client cannot establish a connection to the server.

If this error occurs right after starting the synchronization, either the URL entered for the server is wrong or there's usually a basic networking problem. Note that if you can reach the internet only via a proxy

server, your proxy settings must be configured correctly. To test the connection, try to browse a web site using Pocket Internet Explorer.

If this error occurs in the middle of a synchronization, this is most likely an intermittent problem, see Sending/Receiving error below.

#### **Sending error**

#### **Receiving error**

Most problems with aborted synchronization are caused by unstable data connections. If you are repeatedly experiencing aborted sync sessions with GPRS, try using GSM Data (CSD) - it is slower but generally more stable (where available at all any more).

#### **No response (timeout)**

This means that the server is not responding within a reasonable amount of time (several minutes, usually).

This also indicates a network problem, such as a connection interruption (e.g. when loosing GPRS coverage).

#### **Invalid data**

This means that the data received from the server is not a syntactically valid SyncML message (containing invalid tags or WBXML encoding).

This usually indicates some sort of network problem that causes data corruption on the way.

Another possible cause is that the server is actually generating invalid SyncML message - however this is not likely with well tested and officially SyncML conformant servers (it might occur for new servers still under development sometimes).

In case of network problems, a frequent cause are mobile operators that feed data traffic from mobile devices through equipment that tries to optimize bandwidth. This is fine for web browsing, but often interferes with SyncML. To find out, try to synchronize using the ActiveSync network connection which is available when the device is in the cradle, or insert another mobile operator's SIM card to see if it makes a difference.

#### **Access denied**

This message is shown when the client cannot login with the server.

Usually, the reason is an invalid user name and/or password; Please check the settings and eventually re-enter the password (note that depending on the server it usually is case sensitive)

#### **Sync mode not supp.**

This means that the sync mode specified for a datastore in the settings is not supported by the server.

Usually, this is caused by selecting "update server" or "reload server" mode, which is not supported by all SyncML servers.

### **Aborted by user**

The synchronization was manually aborted by the user.

### **Database not found**

A database (contacts, events, tasks...) was not found.

Usually, this means that the database does not exist on the server side or has a different name than what was entered as server path in the settings.

This message can also mean that the database does not exist or is not accessible on the device itself due to corrupted database structures or similar problems.

### **Device Database error**

Some problem occurred accessing the device's databases.

This also indicates some internal database problem, usually caused by corrupted data on the device.

### **Server Database Error**

The server reported a problem accessing its data.

This usually indicates a server problem - please check with your SyncML service provider if you repeatedly get this message.

In rare cases, this message can also appear when the real problem is not really in the server, but in the client database (corrupted data).

### **Phone switched off**

For devices with built-in phone, this message is shown when trying to start a sync session while the phone is switched off and no other means to connect to the internet (e.g. via the cradle cable or WLAN) is available.

### **Error Code=<number>**

Some rarely occurring error codes do not have a text message, but are shown like this.

Some codes you might encounter are:

- |     |  |
|-----|--|
| 101 | Server is busy   |
| 400 | Bad request (usually a server compatibility problem)   |
| 415 | Unsupported media type or format (usually this means that the server does not support this type of data - for example synchronizing task to a server that has no support for tasks). |
| 500 | Command failed (usually a server malfunction of some kind or a SyncML compatibility problem)   |
| 511 | Server error (some general server error)   |
| 520 | Server database full (the server has no room to store more data)   |

20998 Internal exception (client encountered an internal exception -  
a possible reason could be extreme shortage of memory in  
the device)