Conduit for Windows
Version 4
Manual

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HanDBase Conduit for Windows
Introduction

The HanDBase Conduit is an Add-On utility that works with the HanDBase application for your handheld device.

There are, in fact, three separate editions of the HanDBase Conduit.

Plus edition Conduit
The Plus edition conduit enables synchronization between individual user's handhelds/smartphones and a Windows desktop. While multiple users can synchronize with the same desktop computer the data is synchronized to individual user's folders and no data sharing is possible.

Professional edition Conduit
The Professional edition conduit enables synchronization between individual user's handhelds/smartphones and a Windows desktop computer. This enables multiple users to Synchronize with their own set of databases but also enables groups of users to synchronize with a single copy of a database on that desktop computer. Additionally this conduit makes it possible to Synchronize a single user or group of users with a Microsoft Access Database. Details on the Multi-user Synchronization and Synchronization with MS Access are discussed in the Sync Exchange documentation.

Enterprise edition Conduit
The Enterprise edition conduit enables synchronization between individual user's handhelds/smartphones and a Windows desktop computer. This enables multiple users to Synchronize with their own set of databases but also enables groups of users to synchronize with a single copy of a database on that desktop computer. Additionally this conduit makes it possible to Synchronize a single user or group of users with a Microsoft Access Database or any other ODBC Data Source. Details on the Multi-user Synchronization and Synchronization with MS Access or ODBC are discussed in the Sync Exchange documentation.

What packages include the HanDBase Conduit?

The Plus edition of the HanDBase Conduit is available separately as well as part of the following packages.

HanDBase Plus for Palm OS

The Professional edition HanDBase Conduit is available as part of the following packages. It is not available separately.

HanDBase Professional for Palm OS
HanDBase Sync Exchange for MS Access, Palm OS edition

The Enterprise edition HanDBase Conduit is available as part of the following packages. It is not available separately.

HanDBase Enterprise for Palm OS
HanDBase Sync Exchange for ODBC, Palm OS edition

Following are the system requirements for the Standard edition HanDBase Conduit. The additional requirements for the Professional and Enterprise editions are available in the Sync Exchange manual.

Microsoft Windows 95, 98, ME, NT 4.51, 2000, XP Home or Pro, Vista Home, Home Premium, Business or Ultimate

HanDBase and HanDBase Desktop version 4.0 or greater

Palm Desktop and HotSync Manager 4.0 or higher (Palm OS users)

2MB of hard drive space

Getting Started

Program Registration

In order to use your registered version of the HanDBase Conduit you will need to enter your 16 digit License Key.

If you purchased this software directly from DDH Software then this License Key is found by logging into the DDH Software website using the email address you registered with and the password you were provided when you registered.

If you purchased the software online through the DDH Software website or through one of our resellers then you should have received your License Key in your confirmation email. Within one business day of purchasing you'll also receive login information for the DDH Software website where you can get your License Key.

If you purchased this software in a retail outlet then this License Key is printed on the insert to the package for the software. Be sure to use the correct code for your handheld and desktop platforms. You will also want to follow the instructions for registering the software so that you can download future updates and receive Technical Support.

If you are a Windows user you will be prompted to enter your License Key during the installation process. Once entered you will be able to use the Windows Desktop components you are registered for.

If you purchased one of the packages listed above you will be prompted for the License Key during installation of that and entering that will activate the Conduit that is part of that package.

Installation

Palm OS

The HanDBase conduit is installed when you run the Installation program that you downloaded from the DDH Software website. You can verify that it is installed by accessing the HotSync manager. HanDBase 4.0 will be listed in addition to the standard Palm Conduits (Date Book, Address Book, etc) and any other Conduits you have installed.
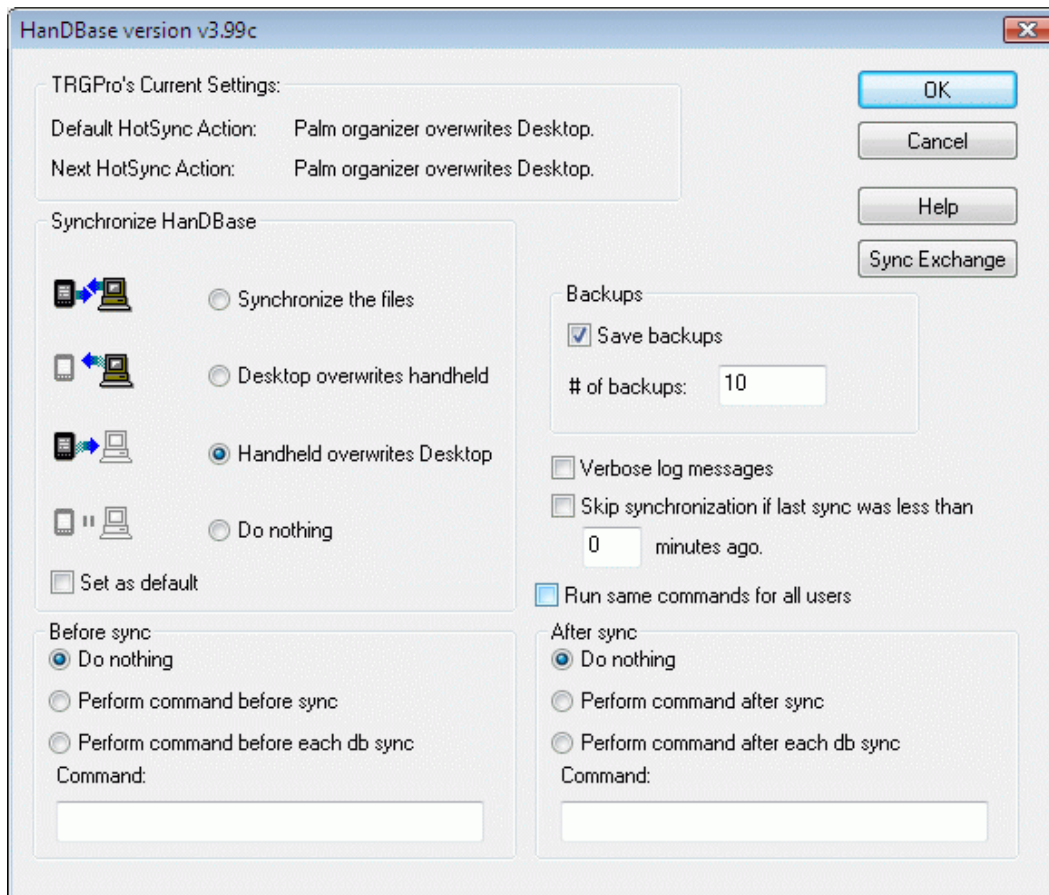
If the "HanDBase 4.0" Conduit is not listed or if you need to re-install it you will need to re-do the installation for the software you have downloaded.

During the standard install process, when you run the Installation program, any HanDBase databases that you currently have in your User Backup folder (ie C:\Palm\hauperd\backup\) will be moved to the HanDBase Backup folder (ie C:\Palm\hauperd\HanDBase\Backup). When the file is moved it will be renamed and the new filename will be preceeded by 'original'. For example if you had a database file called Test.PDB, after it is moved it will be called 'original - Test.PDB'.

There are a few reasons for this to happen:

1. It avoids confusion if you were to try to open files you previously opened from the Backup folder, since the only files Synchronized are those in the HanDBase folder.

2. If for some reason you had you System conduit set to Desktop Overwrites Handheld then if there were HanDBase files still in the Backup folder then after the HanDBase Sync anything you changed would be replaced with an older version of the Database.

3. If you have to do a Hard Reset, or you lose all your data in some other way, when the HotSync manager restores your data, if there is anything in that Backup folder it will be restored over top of what was restored from your HanDBase folder. This will most likely cause data loss because the data in the Backup folder is usually much older than what is in the HanDBase folder.

You can change the following settings for the HanDBase conduit. You will need to access the Custom option for the HotSync Manager by clicking the red and blue HotSync icon in the tray, by the time. Then select the HanDBase 4 Conduit and click the Change button. Palm Desktop 7.0 users will need to click the HotSync icon and select Settings. Then click the Applications option and select HanDBase 4 Conduit and click Configure.

Synchronization Settings:

> **Synchronize the Files** - Selecting this option will synchronize the data between your handheld and desktop so the information matches after a HotSync.

> **Desktop Overwrites Handheld** - Selecting this option will make the data that is stored in the HanDBase folder overwrite what is on the handheld.

> **Handheld Overwrites Desktop** - Selecting this option will make the data that is on the Handheld overwrite what is in the HanDBase folder on the Desktop. This is equivalent to simply backing up your files.

Do Nothing - Selecting this option will make it so that no action is performed when a HotSync is done.

NOTE: If you make a change to the synchronization settings and want that to happen each time you HotSync you will need to check the "Set As Default" box before you click OK. If you do not do that then the change will only apply to the next HotSync you do.

Backup Settings
By default the HanDBase Conduit will make a backup of your databases each time you make a change so that if you need to you can restore a previous version. This setting determines how many backups of each database will be kept. The default is 10 (ten). You can set it to be anywhere between 1 and 10. If you do not want any backups kept then un-check the box next to Save Backups.

NOTE: If you have a lot of databases, keeping the maximum number of backups will take up space on your hard drive. For example if you have 100 databases that will store a total of 1000 files in your backup folder.

Verbose Logging:
This option is disabled by default. If you enable it, by checking this box, then the messages you see in the HotSync/ActiveSync Log will have more detail, indicating the exact databases that were Synchronized and if there were any special conditions when Syncing.

Skip Synchronization if last sync was less than # minutes ago
This option helps you speed up your Synchronization times by specifying not to sync your database files if you synched less than the specified number of minutes ago. If this option is enabled and you sync again within the specified time period HanDBase database synchronization will be skipped.

NOTE: By enabling this, if you make changes to your databases and synchronize within the specified time period the changes you made will not by synchronized between your computer and handheld/smartphone.

Sync Exchange (Button):
This option will ONLY be available if you have HanDBase for Palm OS Professional or Enterprise, OR if you have the purchased the HanDBase Sync Exchange for MS Access or ODBC separately. You can find more detailed instructions on this function in the Sync Exchange section of this manual.

Before Sync/After Sync Settings
Setting these options allows you to run a command, such as a batch file, or a program either before or after the HanDBase portion of the Synchronization. This is ideal for converting files before or after the Synchronization in order to get the data to or from other programs. These settings each have the following options:

Do Nothing - When this option is selected no action is performed.

Perform command before/after sync - When this option is selected the "Command" is performed either before the entire HanDBase Sync takes place or after the entire HanDBase Sync takes place. This is as opposed to before or after an individual database.

Perform command before/after each db sync - When this option is selected the "Command" is performed either before each and every database that has been modified is Synchronized or after each and every database that has been modified is Synchronized. This means that if you have 5 databases the command will be performed 5 times. This option can come in handy if you pass the database name to the command or program so it can perform a specified function on that file only. Additionally this option will only be performed if any of your databases have been modified. If no databases were changed it will not be performed. As opposed to the "Perform command before/after sync" which will perform it regardless of whether any databases have been modified.

The *Perform Command Before/After each DB Sync* options also have three possible parameters. These options enable you to pass these parameters to your command or program.

CURRENTFILENAME is replaced with the complete PC file name (drive, path, name, extension). You can put this string anywhere, and more than once.
DATABASENAMEONLY is replaced with the complete handheld database name. You can put this string anywhere, and more than once.
PALMUSERNAME is replaced with the user name of the Palm, Pocket PC/Windows Mobile or Windows Mobile Smartphone device which that Database is synchronized with. You can put this string anywhere, and more than once.

Run same commands for all users
If this option is checked then the same Before sync and After sync commands will be used for all Palm, Pocket PC/Window Mobile or Windows Mobile Smartphone users on that desktop/laptop computer. If you have a command already entered for a user and check that box then that command will be used for all other users. If you have no commands entered then when you check that box you will be able to enter commands that will apply to all users.

How it Works

Introduction
Be sure to read this Synchronization section in full so you are aware of any limitations in the Synchronization.

The HanDBase Conduit enables users to Synchronize their data between a handheld/smartphone and a Windows desktop/laptop computer. There are different editions of the conduit that enable certain features in terms of Single User synchronization versus Multi User synchronization. The standard HanDBase Conduit, included with HanDBase Plus, is a Single User Conduit. This means that when users synchronize they are synchronizing with a set of their own data on that computer. Multiple users can synchronize with the same computer but NOT with the same set of data. If you want to be able to Synchronize multiple users with the same set of data you will need the conduit available as part of the HanDBase Professional or Enterprise edition. You can also purchase that conduit separately as the HanDBase Sync Exchange Conduit for MS Access or ODBC. The reason the conduit name mentions MS Access and ODBC is because, in addition enabling Multi User synchronization you can also Synchronize directly with MS Access or ODBC, depending on the edition or Conduit you purchase.

By default the HanDBase conduit will synchronize the data between your handheld/smartphone and the desktop/laptop. This will enable you to enter or edit data on the desktop/laptop and the

handheld/smartphone at the same time and when you HotSync the data will match. In the following sections we describe the specific information that pertains to what happens during a Synchronization and how certain Data changes, Fields Types, Master Record changes, and Structure Changes are handled.

IMPORTANT!! - For the Synchronization to work properly the times on your handheld and desktop computer must be as close as possible in order to avoid any conflicts. If you are a Palm OS handheld user then there is no way built into the Palm Desktop or HotSync manager to keep these in Sync but there are 3rd party programs available that can do this. If you are a Pocket PC handheld user then by default ActiveSync® will synchronize the times between the handheld and desktop. If you have disabled this option we recommend you Open ActiveSync®, click the Options button and check this option to re-enable it.

NOTE: If you are a Palm OS handheld user then HanDBase MUST be installed in the Internal/Main Memory of your handheld in order for the Synchronization to occur. Currently installing it on a supplemental storage medium such as a CF card, SD Card or Springboard Flash Module is NOT supported.

How to Synchronize

Palm OS

Palm OS users will not need to do anything special to Synchronize your HanDBase databases. The Synchronization is controlled by the HotSync process. When you press the HotSync button all Palm OS related conduits, including HanDBase, will synchronize.

HotSync Log

When the Synchronization process is complete you will be able to view the HotSync log to see what happened during the Synchronization process. Here you will be able to find things such as which version of the HanDBase Conduit is running, how many HanDBase databases were Synchronized and if there were any Warnings or Errors during the Synchronization. Additionally, if you have Verbose Logging enabled you will see exactly which HanDBase databases were synchronized.

Where there may possibly be different Warning or Error messages in the HotSync log you will consistently see the following type of message indicating how many databases were synchronized, which version of the HanDBase Conduit is running and when the synchronization took place, in that order. The version number is in parentheses.

17 HanDBase databases synchronized (v4.0) 09/20/02 15:40:19

How Data is Synchronized

Data Changes

Generally when you change data in HanDBase on the handheld/smartphone or on the desktop/laptop the data will be synchronized and after you Synchronize the data in both places will match. Please read the other sections under Synchronization for further details and limitations. The following information gives details on how the standard Synchronization works.

Records are never duplicated when there are conflicts.

If a record is deleted in one location and modified in the other the modification will win out and after the next Synchronization the record will NOT have been deleted and the modification will be present in both locations. For example, if you delete a record on the desktop/laptop and forget

you deleted it, and then modify that same record on the handheld/smartphone, after the next Synchronization the record will re-appear on the desktop/laptop with the modification.

If you edit a record on both the handheld/smartphone AND the desktop/laptop, whichever database was modified last will win out. For example if you change the last name of someone named 'Smith' to 'Smyth' on the handheld/smartphone, and then change it to 'Smythe' on the desktop/laptop, after the next Synchronization both locations will reflect the change made to the desktop because that change was made last. Note: This is dependent on the clock on your handheld/smartphone and desktop/laptop being in Sync. If they are off then this may not work as documented.

If you edit a record on the handheld/smartphone OR the desktop/laptop, after the next Synchronization that change or addition will be reflected in both locations.

If you add a record on the handheld/smartphone OR the desktop/laptop, after the next Synchronization that change or addition will be reflected in both locations.

If you edit or add one record on the handheld/smartphone OR the desktop/laptop, and a second record in the other location after the next Synchronization both changes or additions will be reflected in both locations.

Field Type Information

Text, Integer, Float and Popup fields popup items:

If you add a popup item to the database on the handheld/smartphone OR the desktop/laptop that change will appear on both after the next Synchronization.

If you edit a popup item on the handheld/smartphone OR the desktop/laptop that change will appear on both after the next Synchronization.

If you edit the same popup value on both the handheld/smartphone AND the desktop/laptop, whichever Database was changed last will be the one that prevails. For example if you have a popup value of Smith and you change it to Smithe on the handheld/smartphone first and then change it to Smyth on the desktop/laptop when you Synchronize both will now indicate Smyth because the desktop was changed last.

Master Record Changes

The following items can be changed and the changes will be Synchronized and appear on both the handheld/smartphone and desktop/laptop after the Synchronization.

- Sort Order
- Field Filtering
- Field Order
- Database Category
- Search String
- Database Author/Comment
- Adding Views

If you change any data in one the above items on the handheld/smartphone OR the desktop/laptop, the change will appear on both after the next Synchronization.

If you change any data in one the above items on both the handheld/smartphone AND the desktop/laptop, whichever set of parameters that was changed last will be the one that prevails. For example, if you change the Author name from Dave to David on the desktop/laptop and from Dave to Dave D on the handheld/smartphone, the change made on the handheld/smartphone will be on both after the next Synchronization.

If you change data in MORE than one of the above items on the handheld AND/OR the desktop/laptop whichever was changed last will be the one that prevails. For example, if you change the Author on the handheld, and the Sort Order on the desktop/laptop, the change to the Author name will be lost after the next Synchronization and the Sort Order change will appear on both after the next Synchronization.

Structure Changes

The design of the HanDBase Conduit is sensitive to changes to the structure of the database. A change to the structure is defined as changing one of the following items in your database either on the desktop or on the handheld:

Change to a Field Type, including adding a new field to the database or making an existing field not used.

If you change any of the above items, whichever database was most recently changed will prevail. In other words the data and structure will be taken from the most recently changed database. The older or unchanged database is backed up if you have that option enabled. Note: This is dependent on the clock on your handheld and desktop/laptop being in Sync. If they are off then this may not work as documented.

Example 1: If you "Add" a field on the handheld by changing it from Not-Used and then add a record on the desktop/laptop the handheld addition will be lost and the added record will appear on both meaning the desktop/laptop, which was changed most recently, overwrote the handheld where a field type change was made.

Example 2: If you change a Field Type from integer to text on the handheld and then add a record on the handheld, making no changes on the desktop/laptop, the Field Type change and record addition will appear on both after the next Synchronization.

Example 3: If you add a record on the handheld and then change a field type from Not-Used to Float, adding a field, the Field Type change will appear on both after the next Synchronization and the record addition will be lost.

NOTE: There is a greater chance of lost data when you are changing the Structure of a database even with the HanDBase Conduit. Please be aware of these limitations and make sure that you if you make changes to the structure on one end, the handheld, for example, DO NOT make changes to your data or add new records on the other end, the desktop/laptop in this example, if you are Changing the structure of the database. However if your data is lost it will be retained in a backup if you have that option enabled. Please see the Backup section for more information.

NOTE: This section does not apply to Windows Mobile Smartphone users as this platform does not currently allow for structure changes on the device.

Backups
Backup

By default, the HanDBase Conduit will backup up to 20 total copies of each of your databases in a Backup folder within your HanDBase Synchronization folder. This means 10 each of the desktop/laptop copy and the handheld/smartphone copy. You can change this to be anywhere from 1 to 10 sets of backups or disable it entirely in the HanDBase Conduit Options, as described above.

This feature makes it possible to restore a previous copy of your database if a change is made to one of your databases that was not supposed to be or was accidental.

The file names of these backups is modified slightly. It contains the name of the database but also includes whether it was the desktop/laptop copy or handheld/smartphone copy. It also includes the date and time that the file was backed up. For example:

> *Test desktop # 2002-09-15 18-27-06.PDB*
> OR
> *Test handheld # 2002-09-15 18-27-06.PDB*

The first part is the name of your database followed by the indicator as to where the file originated, either handheld/smartphone or desktop/laptop, and then a #. You will then see the date the backup was created separated by dashes, 2001-02-24, followed by the time, in 24 hour time, separated by dashes, 18-27-06 (6:27:06PM) and then .PDB, depending on the configuration of your computer, some computers do not display the .PDB.

The way this function works is as follows. When you synchronize, the conduit determines if any changes have been made to a particular database. If it determines that no changes were made to either side then it will be skipped and no backups will be made. However if it determines that a change has been made to either side it will first make a backup copy of the handheld/smartphone copy of the database and the desktop/laptop copy of the database and put it in this folder. Then the conduit will merge the two original databases together so the changes made are reflected on both sides.

Restore

If you need to restore a database open the HanDBase Desktop and choose Open from the File menu. Then click the Browse Files button. Navigate to the HanDBase Synchronization backup folder, usually:

> C:\Palm\<username>\HanDBase\Backup

Then select the file with the name of your database that has the most recent date and time and click the Open button. You will however want to determine if you want to restore the original handheld/smartphone copy or the original desktop/laptop copy so you will likely want to open both of those files to determine which you would like to restore, unless you are already sure.

For example if you database was named Customers the standard file name would be Customers.PDB. If you had just done Synchronized and it had been backed up it would have a current date and time, 2002-09-15 12-15-05. The backup file name would be *Customers desktop # 2002-09-15 12-15-05.PDB* or *Customers handheld # 2002-09-15 12-15-05.PDB.*

After you verify that the data you want is intact choose Save As from the File menu. You will want to change the file name to not include the date and time. The location where you save it is not important. Then when you are prompted to Install it, select the correct user name and click the OK button.

To avoid any conflicts when you Sync you will then want to navigate to your HanDBase Synchronization folder, usually:

  C:\Palm\<username>\HanDBase

and Delete the existing copy of your database from the that folder. If you do not then when the handheld/smartphone Syncs with this file it may create duplicate copies of records or delete records that should not have been deleted.

When you Synchronize the next time that copy of the database will be installed, overwriting what is on your handheld/smartphone, and then Synchronizing it back to your desktop/laptop replacing the copy in your HanDBase folder.

Archiving

Archive

A standard feature of the HanDBase Conduit is to automatically archive your databases if they are deleted from the handheld/smartphone. This is done automatically.

Therefore if you delete a Database from the handheld/smartphone, the next time you Synchronize, it will be moved to the Archive Folder within the HanDBase Synchronization folder. This way it can be restored if necessary. This archiving will be indicated in the HanDBase ActiveSync Conduit Log, Pocket PC, or HotSync Log, Palm OS, as well.

Restore

If you need to restore a database that was previously Deleted from your handheld/smartphone, open the HanDBase Desktop and choose Open from the File menu. Then click the Browse Files button. Navigate to the HanDBase Synchronization Archive folder, usually:

  C:\Palm\<username>\HanDBase\Archive

Then select the file with the name of your database. Then click the Open button.

After you verify that the data you want is intact choose Save As from the File menu. Change the location where the file is to be saved to a different location. Then when you are prompted to Install it, select the correct user name and click the OK button. When you Synchronize the next time that copy of the database will be installed back to your handheld/smartphone and then Synchronized back to your desktop/laptop putting a copy in your HanDBase Synchronization folder.

NOTE: If you have a database on your Pocket PC/Windows Mobile handheld or Windows Mobile Smartphone with the same file name as the one you are restoring or on your Palm OS handheld with the same database name then when you install the Archived copy it will overwrite the one on your handheld. To avoid this change the actual name of the database in the HanDBase Desktop before you save it and the filename as you save it.