



HanDBase[®]

**Sync Exchange for ODBC
Conduit for Windows
Version 4
Manual**

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HandBase Sync Exchange Conduit for Windows

Introduction

What is HandBase Sync Exchange?

HandBase Sync Exchange is an Add-On utility that works with the HandBase application for your handheld/smartphone device.

Sync Exchange enables two unique functions that can be used separately or in combination. You can use Sync Exchange to set up Multi-User synchronization to a single HandBase Database on a desktop computer or server. You can also use Sync Exchange to synchronize your handheld HandBase database with an ODBC Data Source on a desktop computer or backend server, such as MS Access, SQL Server, MySQL, Oracle, etc.

Sync Exchange for ODBC will be able to Synchronize with MS Access and other ODBC compliant applications.

As mentioned previously you can use the functions mentioned above, in combination. This means you can, for example, set up a database that multiple users will synchronize with that will also synchronize with an MS Access table.

What packages is HandBase Sync Exchange included with?

HandBase Sync Exchange for ODBC is available separately and is also included in the following packages.

- HandBase Enterprise for Palm OS
- HandBase Enterprise for Windows Mobile Classic/Professional (Pocket PC)
- HandBase Enterprise for Windows Mobile Standard (Smartphone)

System Requirements

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

Microsoft Access 97, 2000, XP(2002), 2003 or 2007 required for synchronization with Microsoft Access

ODBC-enabled product required for synchronization with an ODBC data source

HandBase and HandBase Desktop version 4.0 or greater

Microsoft ActiveSync 4.0 or higher (Windows Mobile Classic/Professional (Pocket PC) or Windows Mobile Standard (Smartphone) users)

Windows Mobile Device Center 6.0 or higher (Windows Vista users with Windows Mobile Classic/Professional (Pocket PC) or Windows Mobile Standard (Smartphone) devices)

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

4MB of hard drive space

Getting Started

Program Registration

In order to use your registered version of the HanDBase Sync Exchange for ODBC 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

This application is installed when you run the installation program you downloaded from the DDH Software, Inc. Website.

Setup

Accessing Sync Exchange

Palm OS Users

To access HanDBase Sync Exchange for ODBC open the HanDBase Desktop and from the Configure menu select Palm Users and then select Sync Exchange. This will open the Sync Exchange Configuration dialog. The functions behind this enable the Multi-User Sync between multiple Handheld users, Palm, Windows Mobile Classic/Professional (Pocket PC) or Windows Mobile Standard (Smartphone), to a single Desktop database, as well as Synchronization with an ODBC database table, also amongst Multiple Users, Palm, Windows Mobile Classic/Professional (Pocket PC) or Windows Mobile Standard (Smartphone).

NOTE: This can also be accessed by clicking the red and blue HotSync icon in the Tray area, by the time, and selecting Custom from the menu. Then highlight HanDBase 4 and click the Change button. On the HanDBase Conduit Settings window you will see the Sync Exchange button.

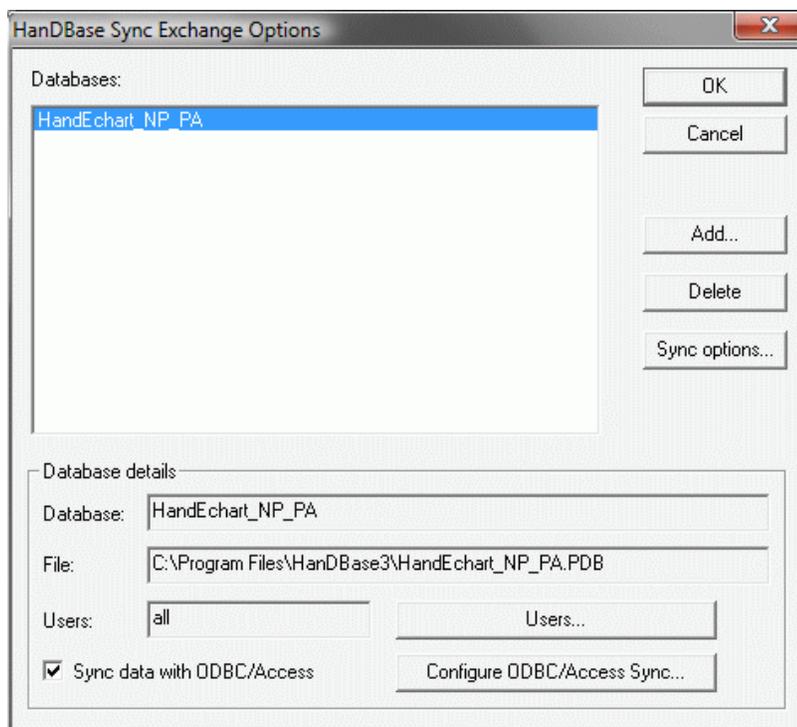
Pocket PC/Windows Mobile – Windows Mobile Smartphone Users

To access HanDBase Sync Exchange for ODBC open the HanDBase Desktop and from the Configure menu select Windows Mobile Users and then select Sync Exchange. This will open the Sync Exchange Configuration dialog. The functions behind this button enable the Multi-User Sync between multiple Handheld users, Palm, Windows Mobile Classic/Professional (Pocket PC) or Windows Mobile Standard (Smartphone), to a single Desktop database, as well as Synchronization with an ODBC database table, also amongst Multiple Users, Palm, Windows Mobile Classic/Professional (Pocket PC) or Windows Mobile Standard (Smartphone).

NOTE: You can also access these settings by locating the HanDBase 4 folder on your Start Menu under Programs/All Programs. There you will find the HanDBase ActiveSync Conduit Options. Select this item. This will open the HanDBase Conduit Settings Screen. On this screen you will see a Sync Exchange Button.

NOTE: You can also access these settings by running a Synchronization and then when it is complete click the Options button on the Sync Progress Screen.

Sync Exchange Options



This screen is the starting point for setting up databases to Synchronize with multiple users will through the HanDBase Conduit. This makes it possible to set up a master database on the computer, or even a server, and then have Multiple Handheld users, Palm, Windows Mobile Classic/Professional (Pocket PC) or Windows Mobile Standard (Smartphone), synchronize with that database. That is the basic functionality of this tool. However this software adds an even more advanced feature. This screen is also the starting point for setting up databases to Synchronize directly with an ODBC or MS Access table. Once configured properly, any changes you make on your handheld or in the selected table in the ODBC data source or in MS Access

will be Synchronized. You can even combine these two options to make it possible to Synchronize multiple handheld users with a single ODBC or MS Access database table.

When you click the *Sync Exchange* button you will see the screen pictured above. On this screen are a number of options. Following is a list of these options and what functions they perform.

Databases List

This list shows the databases that are currently set up to Synchronize with Multiple Users or with

ODBC. You will see this same list regardless of which user you access this screen from as it is universal among all handheld users.

Ok Button

Clicking this button saves any changes and exits this window, returning you to the HandBase Conduit Settings Window.

Cancel Button

Clicking this button discards any changes and exits this window, returning you to the HandBase Conduit Settings Window.

Add Button

Clicking this button will open a File Open Dialog where you can choose a HandBase Database file to Add for Multi-User Synchronization or Synchronizatioin with an ODBC database. You will also use this dialog to type in a NEW HandBase PDB file name if you will be Synchronizing with an existing ODBC data source or MS Access table which does not yet have a corresponding HandBase database.

Delete Button

Clicking this button will Delete the currently selected database in the Databases list to the Left. This will remove it from Multi-User Synchronization and Synchronization with ODBC.

Database Details

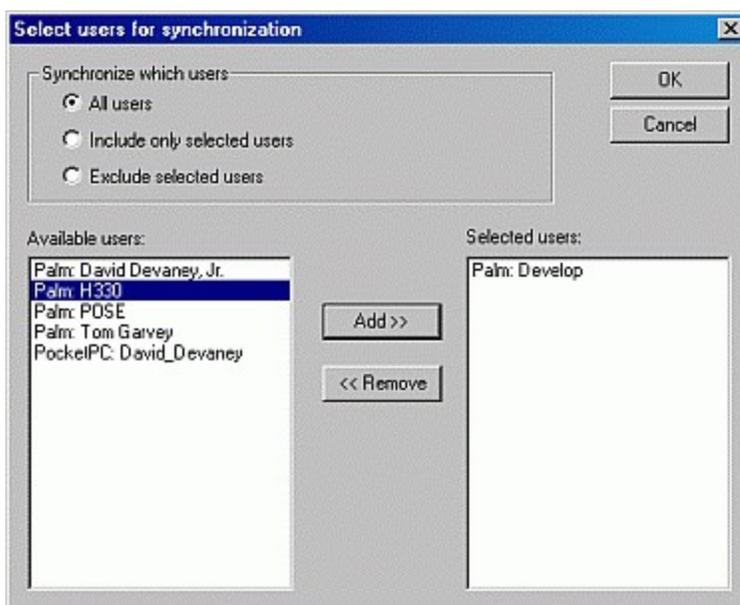
This section lists the details about the currently selected database in the Databases List. Following are the items shown here.

Database:

Displays the name of the HandBase database that is set up to Synchronize.

File:

This option displays the Path and FileName of the HandBase database you are Synchronizing.



Users:

This field displays the Users Sync Option. It will either display **All**, indicating that all users the Sync with this computer will be Synchronized with this database, **include**, indicating that only the users in the Selected Users list on the Select Users screen will be synchronized with this database, and **exclude**, indicating that all users in the

Selected Users list on the Select Users screen will NOT be synchronized with this database.

Users... Button

Clicking this button will take you to the *Select Users for Synchronization Screen*. The options on this screen will be described below in the Select Users section.

Sync Data with ODBC/Access

If you check this option you will be able to access the HDEX Options... screen so that you can configure this database to Synchronize with ODBC, including MS Access.

Configure ODBC/Access Sync

Clicking this option will take you to the *HanDBase Data Exchange for ODBC database Merge configuration Screen*. Here you will be able to set up the options for Synchronizing this database with ODBC. The options on this screen will be described below in the ODBC Database Configuration Screen section.

Select Users for Synchronization

This configuration screen enables you to select the users that you want to Synchronize with this HanDBase database, if doing a Multi-User Sync, or with ODBC if using the Sync Exchange Options. This screen has the following options and sections, which are described below.

Synchronize Which Users

From these options you select which "Groups" of users you want to Synchronize. Following are your choices.

All Users

If you leave the default option of All selected then Every user who Synchronizes with this computer will have this particular database Synchronized in a Multi-User fashion.

Include only selected Users

If you select this option then ONLY the users added to the "Selected Users" list, below, will be Synchronized with this database, in a Multi-User fashion.

Exclude selected users

If you select this option then the users added to the "Selected Users" list, below, will be the only ones that do NOT Synchronize with this database, in a Multi-User fashion.

Available Users:

This list represents all the handheld users that Sync, or have Synced in the past, with this computer.

Selected Users:

This list represents the handheld users that you would like to include or exclude from a Multi-User Synchronization

NOTE: If you leave the All Users option selected above then even if you move users to the Selected Users list they will ALL still be Synchronized.

Add >> Button

Use this button to move users from the *Available Users* list to the *Selected Users* list. Simply highlight the name of the user you would like to move and then click this Add>> button to move that user.

<< Remove Button

Use this button to remove users from the *Selected Users* list and back to the *Available Users* list. To move a user simply highlight the name of that user in the righthand list and then click the << Remove button to move that user.

Ok Button

Click this button to save any changes you have made and return to the Sync Exchange Options screen.

Cancel Button

Click this button to discard any changes you have made and then return to the Sync Exchange Options screen.

Merge Configuration

This screen enables you to configure an ODBC database to Synchronize with your HanDBase database. This advanced feature makes it possible to Synchronize directly with an ODBC table. This means that, once configured properly, any changes you make in your ODBC Data Source, including an MS Access database, or in HanDBase will be Synchronized, or Merged, together when you Synchronize. Following are the options you be able to set in this screen to enable the Synchronization with ODBC.

Enter a HanDBase database

When configuring the Synchronization with ODBC this option will already be filled out based on the Database you chose to Sync for this option.

Apply active HanDBase filters to records being exported

If you check this option then ONLY the records that are in the current filter range will be Synchronized with the HanDBase database.

Select the type of data source to merge to Merge with an ODBC Data Source

Select this option if you would like to Synchronize with an ODBC Data Source. You can click the ODBC Administrator button to view the existing data sources and to add additional ones. Use the drop down selector under *Select an ODBC data source* to choose which ODBC Data Source you want to Sync with.

Merge with an MS Access database

Select this option if you would like to Synchronize directly with an MS Access database file. To select an existing MDB or ACCDB file click the **Browse** button to the right and then navigate to the location where your Access database is. Then select that database and click Open. When you click Browse it will default to looking for .MDB files. If you are using Access 2007, with .ACCDB files, after you click Browse change the “Files of Type” option at the bottom to look for .ACCDB files. You can also type in the path to a new Access database file you want to create and then Synchronize with. HandBase Sync Exchange has the ability to create a new MS Access database from scratch, if you choose that option.

Table Name:

Here you can select an existing table you want to Synchronize with, if you have selected an ODBC Data Source or an existing MDB file. Otherwise you can type in a new name for the table you want to create. Additionally, if you have selected an existing ODBC Data Source or MDB file you can still type in a New Table name to Synchronize with.

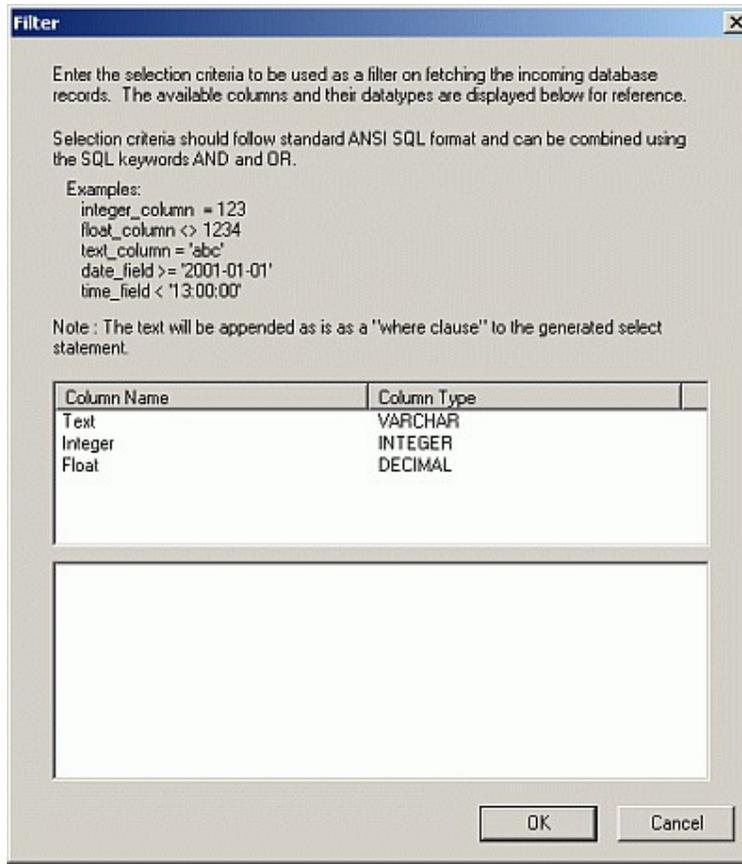
Filter

This feature enables you to enter parameters to filter the data you are importing. This feature is currently designed to be used by users who are familiar with SQL queries and statements. The parameters you will enter are basically what you would enter as part of a WHERE clause in an SQL query or statement. We use the ANSI SQL Syntax for these parameters so you will need to use the same for the portion of the clause you will be entering.

Warning: If you are not familiar with SQL queries or statements we do not recommend you use this feature at this time as there is a chance of data loss if the filter is not set up properly.

To access the Filter screen click on the Filter button below the Table name. You will need to enter/select your ODBC or MS Access database and Table before you can use this option.

After you click the Filter button you will be presented with the Filter dialog, shown below.



In the lower section of this dialog is where you will enter the parameters you wish to base the filter on.

If you double click the column name in the upper section it will put the column name in the lower section where the cursor currently is. That way you do not have to type your field names.

Examples are given in the area above the Column List.

Parameter Details:

Please be aware of the following items and known limitations for your parameters/expressions.

You do not need to put in the WHERE portion of the clause. That will be pre-pended by the program. All you need to enter is something like the following example:

text_value = 'test'

Data Exchange would automatically turn that into:

WHERE text_value = 'test'

If you use the WHERE clause your Filter will fail.

You can use AND and OR in your parameters to perform more complex filtering.

Following is an example of a parameter using AND and OR:

text_value = 'test' AND integer_value = 12 OR text_value = 'notest'

Numeric Values in the condition portion of the parameter must NOT be surrounded by quotes. An example of a correct parameter is as follows:

integer_value = 123
float_value = 123.4567

Non-numeric values, including Text, Date and Time, MUST have the condition portion of the parameter surrounded by SINGLE quotes. Examples of correct parameters are as follows:

text_value = 'test'
date_value = '2002-03-20'
time_value = '21:40:01'

The format of the Date condition portion of the parameter is dependent on the ODBC Driver that is being used to perform the conversion. The HanDBase Data Exchange has no control over whether a date format is supported. However there is one format that is supported by all applications that support ODBC standards. If you use the following format there should be no problems with the Filter.

date_value = 'yyyy-mm-dd'

The format of the Time condition portion of the parameter is dependent on the ODBC Driver that is being used to perform the conversion. The HanDBase Data Exchange has no control over whether a time format is supported. However there is one format that is supported by all applications that support ODBC standards. If you use the following format there should be no problems with the Filter.

time_value = 'hh:mm:ss'

You can use braces/parentheses around your parameters to group them together. Following is an example of a parameter using braces:

(Text = 'test' AND Date < '2000-01-01') OR (Text = 'test2' AND Date > '2001-01-01)

The following are supported ways of evaluating the parameter so your filter produces the correct result.

= (Equal To)
> (Greater Than)
< (Less Than)
>= (Greater Than or Equal To)
<= (Less Than or Equal To)
<> (Not Equal To)

Data Handling

There are three possible ways for handling your data. Following is a list of those options and what you can do with them.

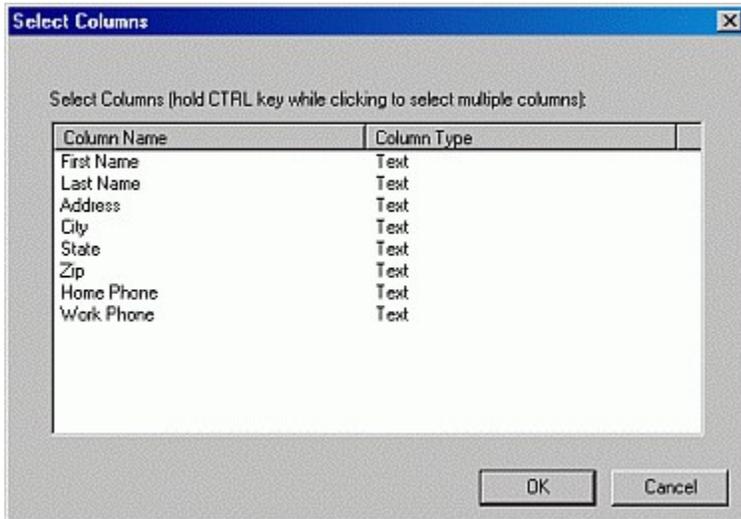
Merge All Columns

If you leave this default option enabled then all Columns/Fields in these databases will be Synchronized.

NOTE: If you choose this option then either you must let Sync Exchange create this table for

you so the Fields properly match up, or, if you already have an existing table, the Fields must match up exactly for them to be able to Sync. This includes Field/Column Names as well as the Data Types.

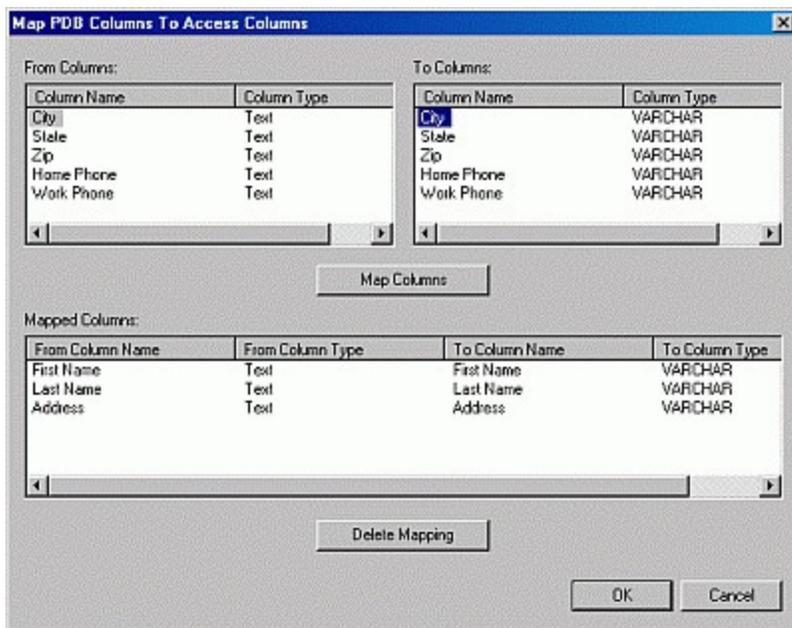
Merge Selected Columns



If you choose this option then only the columns you select to be Merged will be Synchronized. This option is most useful when you are creating the DB from scratch as this allows you to specify which fields you want to be created, and subsequently synchronized. When you select this option and click the "Select Columns" button you will see the screen to the Left. To select your columns click on them in the list. To

select more than one hold the CTRL(Control) key on your keyboard down while you select the columns.

NOTE: If you try to Synchronize with an existing MDB file using this option you must make sure that the Fields match up completely, this includes the Field/Column Names as well as the Data Types.



Merge Mapped Columns

If you choose this option then you will have the ability to Synchronize more completely with an existing MDB file. Using this option you can map specific fields from your HanDBase database with specific fields from your ODBC Data Source or MS Access Table. This is the best option to use if you have an existing ODBC Data Soucre or MS Access MDB file as it will let you match up columns even if they do not have the same field names. When you select this option and click the "Map Columns" button you will see the screen to the left. On this screen you will need to select the HanDBase field from the left hand list and then select the

ODBC/Access Field from the right hand list. After you have selected the appropriate columns click the "Map Columns" button to add that mapping to the lower section. If you have added a mapping and later wish to remove it simply select that mapping from the Lower section and then click the "Delete Mapping" button. When you are finished Mapping columns click the OK button to save your changes and return to the Sync Exchange Options screen. Or, to discard any changes and return to the Sync Exchange Option screen click the Cancel button.

How It Works

Multi-User/ODBC Synchronization

The Synchronization capabilities of this software work the same as the standard HanDBase Conduit. Since that conduit is included with this package the documentation describing it's uses and how exactly it Synchronizes are in the Documentation for that.

To put this in simple terms, if you add, edit or delete records on your handheld or in your ODBC table, those changes will be reflected on both sides when you Synchronize.

If you are only syncing a single user and that user is syncing with an MS Access database or ODBC Data Source then you can point to the databases in that specific user's Sync folder. However, if you plan to do a Multi-User Synchronization then you will need to create a folder to hold the "Master" HanDBase databases that all users will sync to.

You can do a multi-user sync to just a HanDBase database without syncing up to an MS Access database or other ODBC Data Source.

In order to make the synchronization possible Sync Exchange will add two additional text fields to your table. These fields will hold the sync information for the records. When you add new records in your ODBC database you will leave these blank. That will be the indication to Sync Exchange that you've added new records. You must have permission to be able to edit the structure of the database in order for Sync Exchange to add these fields automatically. If you do not have permission to let Sync

Exchange add these fields then you or the Database administrator will need to manually add these fields. The two fields that will be added, or that need to be added if you need to do so manually are as follows.

rhdrinfo_

rhdrid_

IMPORTANT: Please be sure to enter these EXACTLY as indicated above, being sure to include the underscore (_).

If your database is security protected and you enter a username and password to be able to let Sync Exchange access this data then the User must have permissions to Add Records, Delete Records and Modify Records.