Raiffeisen Electra
Passive Automatic Terminal

Automatic HypEx Terminal for Downloading Account Information

Version: 1.5

08/09/2021

H-23(3)

Contents

1. Introduction

This documentation includes a description of the HypEx bank terminal program implementing connection to Raiffeisen Bank with respect for the query function.

2. The Query HypEx program

2.1 The HypEx program

The HypEx program is a 32-bit application running on Microsoft Windows platform, whose task is to automatically establish connection with the Bank.

The HypEx program is a part of the Electra system operating at the Bank, and is connected to the Electra server. It includes the same communication, security, import and export modules as the Electra client program. HypEx programs also have individual ID-s, are attached to customers, and can be updated from the Bank's central system.

When concluding the relevant agreement with the Bank, each customer should name the users who are authorised to use the Electra system. These users each have their own login passwords, their own electronic signature passwords (when vested with signing authority), and authorities specifically defined for each account and correspondence. All these are kept record of and checked by the Bank's system that also downloads specific data (passwords and authority tables) into the program so that enquiry rights can be checked in the course of local use as well.

The user must identify himself before using the HypEx program. Identification takes place by entering the login password.

The HypEx program is enabled to manage several customers simultaneously. Attachment of the customers to the HypEx program is done and kept record of by the Bank's system, and the HypEx system downloads such information into the program so that rights can be checked in the course of local use as well.

The HypEx program does not support network operation, which means that only one copy is allowed to run at the same time.

In the course of its operation the program prepares a log file, in which it can be viewed who and when executed what kind of operation when using the program, and what kind of events occurred. The log is prepared in a monthly breakdown. Each event is presented in a separate line, which includes the exact date and time, the user's ID, and the description of the event in words.

2.2 Hardware and software environment

- Computer suitable to run the given operating system
- Operating systems: Windows 7, Windows 8, Windows 10
- Broadband Internet access for connection to the Bank

3. Managing the HypEx program

Starting the HypEx program, the user will encounter—similarly to the Electra program—a landing page. In this landing page one can manually log in to the Bank, as well as access the main functions. The main functions include the HypEx central core, parameter setting, and viewing the log.

Before using the program, the user must identify himself in the HypEx program. Identification takes place by entering the login password. After successful identification, the user is able to move freely among the different functions without having to enter his password again.

In the course of the normal operation of the HypEx program, after successful identification the user should enter the Manage HypEx function, then start execution by clicking the relevant button (*Restart HypEx* function). Then the program reads in the description table of operations, and checks whether in accordance with the descriptions of dates and times it has any operation to complete. If it has no task to complete for the time being, it will wait until the first date/time occurs, or until automatic operation is stopped.

Maintenance of the description table is possible only if automatic operation is disabled (***Stop HypEx*** function). The maintenance window can be accessed starting from the automatic operation window by selecting the ***Configure HypEx*** function. The maintenance window of the description table shows what kind of operations and when HypEx would execute in the given moment in the automatic mode. Here it is possible to add new operations, change the date/time or format of existing operations, and of course to cancel operations. When maintenance is finished, the newly generated description table must be saved before exiting. If the user so decides, he may as well exit without enforcing the changes.

Under the Set parameters menu, you can change the login and signature passwords, view the HypEx log, and register the program.

The following functions can be accessed in the main screen of the HypEx program:

- Manage HypEx—access to the interface of the automatic sending and query process
- Set parameters—interface for the setting of parameters connected to the general operation of the program
- Connect manually to the Bank's system—Log in button in the top right corner of the screen
- Exit program—Close program button in the top left corner of the screen
- Help—Help sign in the top right corner of the screen

Entering the Manage HypEx menu, one can select from the following functions:

- Restart HypEx—if this menu is active, then the automatic sending and query operating mode is not running at the given moment, and it is here where you can restart the continuous monitoring of the import library and the processing of incoming files.
- Stop HypEx—if this menu is active, the automatic sending and query operating mode is running at the given moment, and it is here where you can stop it.
- Configure HypEx—it is here where the description table for the automatic operation of the program is to be filled.
- View log—log kept on all important operations executed by the program in a monthly breakdown

Entering the Set parameters menu, one can select from the following functions:

Security
- Password settings
- Prepare/view registration order
- Save/Restore
- View log

Settings
- Select language
- View running environment
- Update program

Customer data
- Customer's name and address
- List of account numbers
- Initial account numbers
- List of users
- Active local users
- Cut off times

3.1 Register the HypEx program

After the execution of the contract between the Bank and the customer concerning the operation of the HypEx system, prior to installation the registration of the issued new program is permitted in the Bank's system. Upon the installation of the program, the new program copy **must be reported electronically** to the Bank's system, in other words the program must be registered.

Choose the Set parameters function in the main screen, and then the Registration order option in the screen that appears.

The program creates a registration order, which you should **send to the Bank's system furnished with an authorised signature.** The Bank's system will accept orders from the given HypEx program only after receipt of a registration order.

3.2 Update of the HypEx program

Updates of the HypEx program are initiated from the Bank's central system. You have to log in **manually** to the Bank, then the changes are downloaded, and after you exit and re-enter the program the update is executed.

During the update process, automatic operation must be disabled.

4. Operation of the HypEx bank terminal program

4.1 Rights in the Electra system

The Electra system handles customer codes (i.e. companies), persons (i.e. users) and client programs independently of one another, as separate data sets. The relationship between these are provided by authorisations, which are determined by the companies (the Bank's customers) upon the conclusion of the contract. Accordingly, any kind of relationship can be built up in the Electra system: the same single customer can have several client programs, the

same client program can belong to several companies, one company can have several users, and the same person can be employed by several companies. Someone can log in with any client program that is used by a company for the accounts of which that person has access rights. He can make queries or sign orders with any such program (using the same passwords everywhere), and if he has the required rights, the Bank's system will execute the order.

The customer may use the Electra system only if he has a client program serving to connect to the Bank. Each client program has a serial number, and is attached to a specific customer (or to several specific customers). Each customer may log in to the Bank's system with their own program.

When concluding the relevant agreement, each customer should name the users who are authorised to use the Electra system. These users each have their own login passwords, their own electronic signature passwords (when vested with signing authority), and authorities specifically defined for each account and correspondence. All these are **kept record of and checked by the Bank's system**, that also downloads specific data (passwords and authority tables) into the client program so that enquiry rights can be checked in the course of local use as well.

The login password is known to the user himself only, who can change it any time on his own whenever he thinks that unauthorised parties may have become aware of it (the client program will immediately forward the changed password to the Bank's system, where it will be stored encrypted, i.e. it will be inaccessible even to the Bank's employees). It is essential that the identifier and the pertinent password should be known only to persons authorised to know them. The login password is necessary (and is also at the same time sufficient) to log in to the Bank's system with the client program.

The signature rights of each user can be defined separately for each account: whether he can sign orders in respect of the account, and how much his signature is "worth" (e.g. whether or not signature by other persons is also needed). Before an order is sent in, it must be signed electronically by a user having adequate rights.

4.2 Multi-customer management in HypEx

The HypEx program is enabled to manage several customers simultaneously. Attachment of the customers to the HypEx program is done and kept record of by the Bank's system, and the HypEx system downloads such information into the program so that rights can be checked in the course of local use as well.

The HypEx program will log in to the Bank in the name of the customer defined in the configuration description table. The different operations, however, are able to switch customers, if necessary.

It is a necessary precondition for multi-customer operation that the same user is attached to all customers.

4.3 Configuration—the description table

The central element of the HypEx program is a core that ensures automatic operation, and which works on the basis of a description table. The description table contains operation entries, where each entry includes a date/time description and an operation to be executed. There is a screen dedicated to the monitoring of automatic operation, where one can see the current status of HypEx and the operation it is in the process of executing at the given moment. The user should start and stop automatic operation in this monitoring window, and it is also from here that you can enter the description table maintenance window.

Maintenance of the description table is possible only if automatic operation is disabled.

In the scope of the maintenance of the description table, it is possible to enter new operations, and change or cancel existing entries. The data belonging to the individual entries can also be provided here.

In the Query HypEx program, you can define tasks and operations. One task may contain several operations, in such case they are executed one after the other, and login is needed only once.

Task features:

- Starting time: The starting time of the task, in the case of a recurring task the time when it is first executed. The tasks are examined by the program every minute. A task will not be started if at the starting time another task is already running.
- Period: Frequency at which recurring tasks should start. Its unit is minutes. In the case of a non-recurring task it should be left blank.
- Ending time: The last time when a recurring task shall start.
- Login required: You have to log in for the relevant task. If it is marked, the program will automatically log in on the basis of the provided data, otherwise an administrator will have to log in to HypEx before the task is started.
- Customer identifier: Customer code used for automatic login
- Group: Group code used for automatic login
- User name: The person in whose name the program should log in
- Password: Login password

Operation features:

- **Operation**: The operation to be executed should be selected from a list. The following downloads can be selected:
    - Daily transactions
    - Account statement
    - Account balance
    - CS-STATUS message
    - DETSTA daily report
    - DETSTA summary report
    - FELHKI message
    - FELHNA message
    - Notice of postal cash transfer orders
    - Notice of postal payment orders
    - Transaction History
    - Log off

- **Export format:** The format in which the requested data is to be exported. You can select the desired format from a dropdown list.

  Possible formats:

Daily transactions	T-day account history export format
	T-day account history export format—per account
Account statement*	MT940 format
	MT940 format—per account
	Multicash format
	Multicash format—per account

	Original format
	Original format—per account
	Account history format
	Account history format—per account
Account balance	RBH format
	RBH format—per account
CS-STATUS message	UGIRO format
DETSTA daily report	UGIRO format
DETSTA summary report	UGIRO format
FELHKI message	UGIRO format
FELHNA message	UGIRO format
Notice of postal cash transfer orders	Postal format
	Postal format (items+images)
Postal payment order	RBH format
	Postal format
Transaction history	Export text format

* Only one export type can be used in same time.

- **Export codepage:** You can select either the "Windows" or the "CodePage 852" value.

- **Export library/File name:** A pattern that determines in what path and in what name the requested data are to be saved.

The following **lowercase letters** have special meaning and will be replaced with the following values (if applicable in the given case) therefore always type path with Capital letter. Also see chapter 4.4.

- "**y**" means the **year** numerals from the date of the requested data (max. 4)
  e.g. in the case of the pattern D:\RBH_HYPEX\EXPORT\KIVyyyy.TXT, the file name will be D:\RBH_HYPEX\EXPORT\KIV2016.TXT for data of 31/12/2016
- "**m**" means the **month** numerals from the date of the requested data (max. 2)
  e.g. in the case of the pattern D:\RBH_HYPEX\EXPORT\KIVyyyymm.TXT, the file name will be D:\RBH_HYPEX\EXPORT\KIV201612.TXT for data of 31/12/2016
- "**d**" means the **day** numerals from the date of the requested data (max. 2)
  e.g. in the case of the pattern D:\RBH_HYPEX\EXPORT\KIVyyyymmdd.TXT, the file name will be D:\RBH_HYPEX\EXPORT\KIV20161231.TXT for data of 31/12/2016
- "**h**" means the hours numerals from the date of the requested data (max. 2)
- "**i**" means the minutes numerals from the date of the requested data (max. 2)
- "**s**" means the seconds numerals from the date of the requested data (max. 2)
- "**#**" means the digits of the serial number (number of executions of the task, growing by 1 starting from 1 on max 8 digits)
-

  Hypex assigns one counter to the following queries.
  - daily transactions,
  - balance,
  - statement,

- exchange rate,
- notification

Max number of character '#' in filename can be 8. In other words serial numbers can be max. 8 digit long.

The counter is reset to 1 in case of program restart.

In case of notification only one common counter is defined.
For instance:

Set the following **Export library/File name** for three different types of notification.

for CSS:	D:\RBH_HYPEX\EXPORT\A_####.CSS
for FELHKI:	D:\RBH_HYPEX\EXPORT\B_####.FKI
for daily DETSTA:	D:\RBH_HYPEX\EXPORT\C_####.DET

Let's suppose that we have already downloaded 29 notification files since program was started. The upcoming files might be named in the following way.

A_0030.CSS
A_0031.CSS
C_0032.DAT
A_0033.CSS
B_0034.FKI

The serial number is increased by 1 in case of every file although type (and extension too) of files is different.

The next notification will get serial number 0035.

-
- "**a**" means the digits of the account number (max. 24)
  e.g. in the case of the pattern
  D:\RBH_HYPEX\EXPORT\aaaaaaaa_aaaaaaaa_aaaaaaaa.KIV, the file name will be D:\RBH_HYPEX\EXPORT\10300002_22222222_33333333.KIV for an account number of 10300002_22222222_33333333

  "a" is not used in case of the following cases
  CS-STATUS message
  DETSTA daily report
  DETSTA summary report
  FELHKI message
  FELHNA message
  Statements

- "**c**" means characters of the customer code (max. 8)
  e.g. in the case of the pattern
  D:\RBH_HYPEX\EXPORT\cccccccc_yyyymmdd.KIV, the file name will be D:\RBH_HYPEX\EXPORT\EL100026_20161231.KIV for customer EL100026 and data of 31/12/2016

-
- "**u**" means the characters of the ugiro code (max. 13)
  e.g. in the case of the pattern
  D:\RBH_HYPEX\EXPORT\uuuuuuuuuuuuu_yyyymmdd.CSS, the file name will be

D:\RBH_HYPEX\EXPORT\A123456789000_20161231.CSS for an ugiro code of A123456789000 and data of 31/12/2016

"u" is used only in case of the following notification types
CS-STATUS message
DETSTA daily report
DETSTA summary report
FELHKI message
FELHNA message

Characters provided in uppercase letters in the path will not be replaced, but will be left unchanged.

In the case of per account export formats, only the export library may be identified, and the file name will be the date of the data and the account number:

<24 digits of the account number>_<8 digits of the date of the data>.<extension>

You can identify the parameters of the operation as well, and there is a table serving this purpose. The patterns provided in the table serve as filtering criteria, and only data with values matching these can be included in the output of the export.

E.g. if the account number pattern is ********11111111********, then only those data series will be exported where the value of the second 8-digit segment of the account number is "11111111".

The value of the parameter can be modified by double-clicking on the given line.

- **CLN**: customer identification pattern that determines which customers' data are inquired (optional). If left blank, the data will be inquired in the name of the logging-in customer. You can also enter "*" characters, in such case the data of all customers with matching identifiers will be inquired.

- **ACC**: account number pattern that determines the data of which account numbers are inquired. You can also enter "*" characters, in such case the data of all matching account numbers will be exported. The default is "*", meaning all account numbers.

- **DATE**: an integer number which means **a shift as compared with the current date** in days (e.g. in the case of "–1" the data of the previous day will be inquired). It is optional, and if left blank, by default the latest data will be inquired.

In the case of an account history, fileds customer code and account number must be filled. If you inquire about history of more than one account separate operation must be recorded for each account.

The operation description table needs to be created only once, any subsequent changes can be carried out with the Modify menu.

4.4 Define export libraries

When defining the different operations, it is to be identified in the "Operation details" window, in the field "File name".

For instance in the case of the following pattern

D:\RBH_HYPEX\EXPORT\cccccccc\KIVyyyymmdd.TXT

the file name will be

D:\RBH_HYPEX\EXPORT\EL100026\KIV20161231.TXT

for customer EL100026 and data of 31/12/2016

In the case of per account export formats, only the **export library** may be identified!

For example:

D:\RBH_HYPEX\EXPORT\cccccccc

in such case the data will be saved to the library D:\RBH_HYPEX\EXPORT\EL100026 under the file name <24 digits of the account number>_<8 digits of the date of the data>.<extension>.