

# MultiCash® V5.00

## Changes from Version 4.00

November 2024 – Version 1.4

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## Preliminary remarks

This document describes the essential enhancements of the product platform for MultiCash 5.00 as overall concept.

It is addressed to

- users
- banks
- Omikron Partners
- as well as the internal departments at Omikron, which accompany the development.

The document shall be used to explain to all parties involved in clear form the important functional enhancements.

On the other hand, it shall not show all changes in their entirety. All changes (also details) are documented in the Omikron Change Request Database. This is used to create a complete change list for each Release.

# 1 Introduction

## 1.1 Overview

After the product version 4.00 has been successful in operation for some years, now some comprehensive changes are pending which make a new version 5.00 necessary. Alongside many detailed enhancements, it contains these essential changes and new concepts:

1. **Application model 64-Bit:** So far, the product line MultiCash was implemented as 32-bit application to support also older environments. As since 2020 new computers are only equipped with Windows 64-bit and the end of the 32-bit support by Microsoft is expected, MultiCash 5.00 was realised within the framework of existing maintenance agreements as 64-bit application. This conversion has no impact on any user and the operation. Before the update, it must only be ensured that all computers involved are equipped with Windows 64-bit. At the same time, the C runtime environment was updated and the version identifier was set to 5.00.
2. **Communication:** For EBICS, a new version 3.0 was implemented, which shall be used to simplify the international deployment. MultiCash V5.00 supports **EBICS 3.0** by using additional modules in parallel to the well-proven and widespread protocol version 2.5. In addition, the transport encryption is supported according to the standard **TLS 1.3** for all connections based on http – in particular EBICS. For more details on this subject, see **Chapter 2.3 Communication**.
3. **Security:** To take the increased requirements for the security mechanisms into account, various enhancements were implemented and new concepts introduced:
  - A configurable **approval method** and a detailed **journal** for critical master data changes
  - Support of the secure protocol “**LDAPS**“ for the user logon to the Domain Controller of a network environment
  - Alternative securing of the **logon** by a **locking after three failed attempts**
  - Enhancement of the access control by the concept “**Access classes**“ for **accounts and documents**

These concepts are described in **Chapter 2.4 Security in the Core module application**.

4. **XML Payments/Account information according to ISO 20022 Version 2019:** Over the next few years, some fundamental conversions will be made in the area of customer-bank messages:
  - In the functional areas, which have already used for years ISO-XML messages of the version 2009, the conversion to the ISO-Version 2019 will be made in several steps.
  - SWIFT is planning to replace the MT messages used for decades until 2025 by MX messages based on ISO 20022. This is followed also by the banking committees in their format definitions for the customer-bank communication.

MultiCash 5.00 will support these developments step by step for the delivery of account information and for many local payment methods with national definitions. Some information on this subject can be found in **Chapter 3 XML Messages according to ISO 20022 Version 2019**.

**Attention:** Please ensure that you use the current message formats for SEPA messages and other messages according to the ISO 20022 Version 2009 (pain.001.**001.03** / pain.008.**001.02**). Older versions are more and more no longer supported.

5. **Payment modules:** MultiCash has supported so far many different payment methods by specific payment modules. This is not very comfortable for users who send the payment orders of different message families to their banks. In addition, the above-described conversions are pending. For this reason, MultiCash uses from generation 5.00 only one payment module “CGI“ (Common Global Implementation), which is able to generate as central “Smart Payment Window“ different variants of the ISO-XML messages and national payment formats. For more details, see **Chapter 4.1 CGI Module: Smart Payment Window for all payment methods**.

The update of existing MultiCash environments of version 4.0 is made for a Release update as **simple update installation in the existing program path**.

## 1.2 Update notes

### 1.2.1 Functional profiles

Various new entries have been added to the rights profile. These are deactivated by default. For some functions, the previous authorisation has been divided into several right entries. In this case, previously authorised users lose some of their rights as a result of the update. In such cases, the function profile must be adapted:

**1. Core module/Communication Manager/New**

This profile entry is now only valid for new sending jobs. A new profile entry "New pick-up orders" has been introduced for new pick-up orders, which is deactivated after the update.

**2. Core Module/Administration/General/Journal**

A completely new functionality has been implemented under this name. Therefore, this profile entry is also deactivated after the update.

**3. Module CGI Payments/.../Payments/Order Administration**

With introduction of the new concept "security templates" a new rights profile "**Enter payment orders without security templates**" was added, which is deactivated by default. Therefore, after software update the entry of standard payments is not possible anymore. If you want to allow the entry of standard payments, please activate this profile.

### 1.2.2 Manual payments

The previously separate payment modules for specific procedures are merged into one central payment module (see chapter 4). Existing payment orders and reference tables (especially partners) will be migrated. Due to the very different and partly incompatible definitions of the respective payment procedures, this is a very complex process. For this reason, despite all due care, problems cannot generally be excluded. Therefore, please check your data after the update, especially the standing orders.

Mandate administration for SEPA direct debits:

With the introduction of SEPA direct debits in 2010, the standardised agreement of direct debit mandates between creditor and debtor became necessary. As many company organisations were not prepared for this, the MultiCash module 'Mandate Administration Plus' was developed to support the complex processes from mandate creation to expiry within the payment module for a transitional period. This has lost its significance, as the support of direct debit mandates has now been integrated into the general processes of companies. For this reason, the functionality of MultiCash mandate administration has been reduced to the archiving (import and display) of mandate files. Please ensure that you organise in particular the creation of mandate forms for your customers outside MultiCash.

### 1.2.3 Saved Data Export Jobs

The concept for saved output jobs has been optimised, see section 2.2.1 Report-Engine/Print template. For this reason, when transferring data from version 4.0 restrictions apply for some constellations of output jobs for one-off execution (i.e. without a repeating cycle). These restrictions can be avoided or reduced by changing the print jobs before the software update:

1. One-off private print jobs with output "PDF file" or "Printer" are migrated as print templates with output "PDF for Info Pane". Any defined output path or printer is deleted.  
Adjustment option before software update: If such jobs are used frequently and the output path or printer are important, define a repetition frequency for these jobs (daily, weekly, monthly). They are then migrated to the report engine and executed automatically. Manual execution is also possible at any time.

2. One-off print jobs not marked as "private" are not migrated.  
Adjustment option before software update: You can either mark such jobs as "private" (leads to migration to print templates) or assign an execution cycle (leads to migration to the report engine).
3. One-off export orders are not transferred.  
Adjustment option before software update: Define execution frequency analogous to no. 1.

## 2 Enhancements in the Core module

### 2.1 Cash Management

#### 2.1.1 New: Commitment interests for accounts

The interest conditions were enhanced. As a result, now additional commitment interests can be defined. Commitment interests are invoiced for credit lines that have not been used and turn out to be lower as a rule than the general debit interest rate.

If commitment interests are defined, these are taken into consideration in the functions for interest rate analyses in the Cash Management area.

Interest Conditions
✕

Description

Group unit

Amounts are in the following currency:

Credit Interest

Interest method: German Hamburg Practice

Linked to base interest rate: \_\_\_\_\_  Use value dependant credit ladder interest rate

1st ladder until value	Cred.Int.	Fix	2nd ladder value until	Cred.Int.	Fix	Cred.Int.	Fix	Valid from
0,00	0,00000	<input type="checkbox"/>	0,00	0,00000	<input type="checkbox"/>	0,00000	<input type="checkbox"/>	<input type="checkbox"/> 28.06.2022
0,00	0,00000	<input type="checkbox"/>	0,00	0,00000	<input type="checkbox"/>	0,00000	<input type="checkbox"/>	<input type="checkbox"/> 28.06.2022
0,00	0,00000	<input type="checkbox"/>	0,00	0,00000	<input type="checkbox"/>	0,00000	<input type="checkbox"/>	<input type="checkbox"/> 28.06.2022
0,00	0,00000	<input type="checkbox"/>	0,00	0,00000	<input type="checkbox"/>	0,00000	<input type="checkbox"/>	<input type="checkbox"/> 28.06.2022
0,00	0,00000	<input type="checkbox"/>	0,00	0,00000	<input type="checkbox"/>	0,00000	<input type="checkbox"/>	<input type="checkbox"/> 28.06.2022

Debit Interest

Interest Method: German

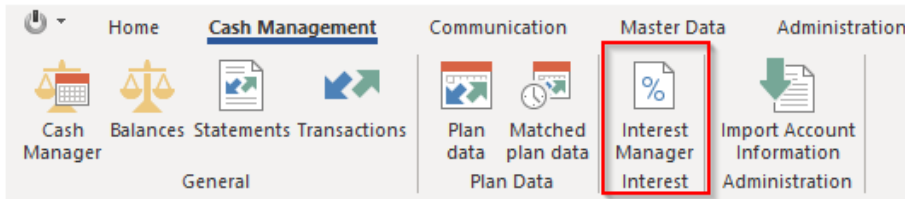
Linked to base interest rate: \_\_\_\_\_

Commitment interest	Debit	OD int.	Fix	Valid from
0,00000	0,00000	0,00000	<input type="checkbox"/>	<input type="checkbox"/> 28.06.2022
0,00000	0,00000	0,00000	<input type="checkbox"/>	<input type="checkbox"/> 28.06.2022
0,00000	0,00000	0,00000	<input type="checkbox"/>	<input checked="" type="checkbox"/> 28.06.2022
0,00000	0,00000	0,00000	<input type="checkbox"/>	<input type="checkbox"/> 28.06.2022
0,00000	0,00000	0,00000	<input type="checkbox"/>	<input type="checkbox"/> 28.06.2022

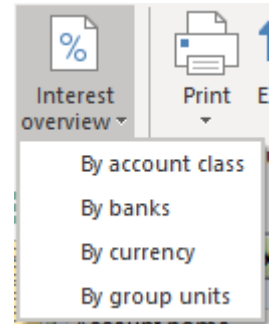
Help Save

### 2.1.2 New: Interest manager

1. Enhancement of the Cash Management menu by the “Interest Manager” function.



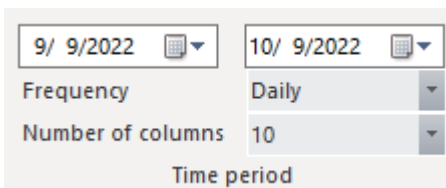
2. Within the interest manager multiple grouping options can be chosen (analog to the Cash Manager):
  - Companies
  - Banks
  - Account groups
  - Currency
  - Group hierarchy



3. In the tree view, the credit and debit interests (and the latter differentiated by commitment, debit and overdraft) are evaluated for each account both balanced and also detailed. In addition, the values are shown added up for each aggregation level. The calculation is made based on the daily value-dated balance.

Account name	A/c. type	Currency	Total period	09/12/22 Mon.	09/13/22 Tu...	09/14/22 Wed.
<b>Total sum:</b>		EUR	<b>489.81</b>	<b>48.98</b>	<b>16.33</b>	<b>16.33</b>
<b>Company:</b>		EUR	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Company: OSH (Omikron Systeme...)</b>		EUR	<b>489.81</b>	<b>48.98</b>	<b>16.33</b>	<b>16.33</b>
Bank: 37050198 (37050198)		EUR	489.81	48.98	16.33	16.33
37050198 / 10203040 / EUR /		EUR	489.81	48.98	16.33	16.33
Credit interest			489.81	48.98	16.33	16.33
Total debit interest			0.00			
Commitment interest			0.00			
Debit interest			0.00			
Overdraft interest rates			0.00			

4. The periods of analysis can be chosen freely so that optionally the totals for weeks, months, quarters or whole years can be calculated.  
 -> The total in the first column shows the total amount for the chosen time period and the additional columns show in each case the interests for the particular day (depending on the chosen frequency).



## 2.1.3 Book balances

### 2.1.3.1 Performance optimisation

The book balance performance was optimised. For each account, now a “current book balance” record is administered. For this reason, no longer all available balances need to be read per account and the latest be identified. This has a particular effect if the check box “Show all” is not chosen.

### 2.1.3.2 Conversion in any currency

A balances conversion in any currency was in the past only possible in the Cash Manager (valuedated balances).

This conversion is now also available in the book balances view:

Search in account name		<input checked="" type="checkbox"/> Convert into	GBP Pound Sterling
Account name		<input type="checkbox"/> Show all	
Stock	Current	Current balance information	
Display			

### 2.1.3.3 Display period closing balances

New functions (context menu) for opening new tabs with period overviews (without the columns "opening balance" and "total debits" and "total credits"):

- Monthly overview
- Quarterly overview
- Half-yearly overview
- Annual overview

7354119623/CHF	BZBA12345678901234567890
154319082	
3656066749	
204208534	
104099214	
2400625467	
2055011811EUR	
7050849793/USD	
100131920	

View details

- Monthly overview
- Quarterly overview
- Half-yearly overview
- Annual overview

Optimize the width of all columns

Restore the original sequence of the columns

### 2.1.4 New: Account information: Display batch items

**Short description:** The additional module “BBS – Booked Batches Support“ for the Cash Management supports the display of single transactions for batch bookings.

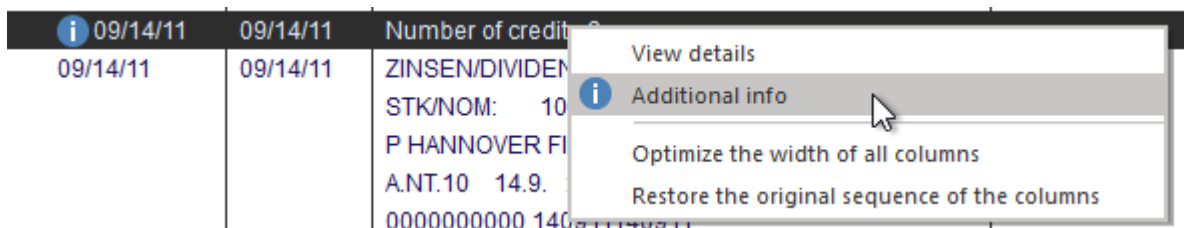
**Background:** In the camt.053 or a separate camt.054, transaction details (single bookings) of a batch booking can be transmitted to the customers.

→So far, these have not been processed / displayed.

1. In the **Statements** and **Transactions** functions, batch bookings, for which single bookings are available, are marked with a symbol:

Value date	Entry	Details	Entry text	Ordering party / Partner	Client reference
09/15/11	09/14/11	EINREICHER-NR. 01 SCHECKEIN REICHUNG		SCHECK-EINREICHUNG	NOREF_21:43:33_+8
09/15/11	09/14/11	UEBERWEISUNGEN			NOREF_21:43:33_+15
09/15/11	09/14/11	100 373378900			100 373378900
09/14/11	09/14/11	AVIS VOM 13.09.2011 ZU ZAHLUNGSBELEG 00007 06706		SOME CREDITOR GMBH	
09/14/11	09/14/11	RUECKVERGUETUNG AUS LJ06117 4103012 ZUM 01.09.2011		ANKE DANKE	ZAS000225899051
<b>i</b> 09/14/11	09/14/11	<b>Number of credits 3</b>			
09/14/11	09/14/11	ZINSEN/DIVIDENDEN/ERTRAEGE STK/NOM: 1000000 VAR. P HANNOVER FINANCE(LUX. )S. A.NT.10 14.9. :40 DT 0 000000000 140911140911			NOREF_21:43:33_+3
09/14/11	09/14/11	ZINSEN/DIVIDENDEN/ERTRAEGE FIL/DEPOT-NR: 100/123456702 6P DT.PFANDBRIEFBANK OFF.R .392 14.9. 15 DT 00000000000 14091114091 1			6P DT.PFANDBRIEF
09/14/11	09/14/11	UEBERWEISUNGEN			NOREF_21:43:33_+12

2. Function for displaying single bookings (analog to the standard transaction display) on a separate property page (using the context menu) which contains as identification the bank reference as well as the amount of the batch transaction.



Statements **Bank reference: 121883189 Amount: 531.23** x

Account name Sammlerauflösung2	Account class 0	Statement date 09/14/11	Statement number 37
IBAN	International bank ID (BIC) DEUTDEFFXXX	Currency EUR	Opening balance 3,273,663.42
Local bank ID (BLZ) 50070010	Account number 12345670000	Group unit OSH	Total Debits 2,950,754.07
50070010	Omikron Systemhaus		Total Credits 12,289,392.03
			Closing balance 12,612,301.38

Status	Value date	Entry	Details	Entry text	Ordering party / Partner	Client reference	Currency	Amount	Creditor ID
	09/14/11	09/14/11			SWISS PAYER	NOTPROVIDED	EUR	136.80	
	09/14/11	09/14/11	Txid: 100911JECTA1N880 Msgld: NSCT1109140001100000 0000000000000001		SOMEBODY IN BELGIUM	NOTPROVIDED	EUR	368.43	
	09/14/11	09/14/11	EndToEndId: A0762747096112 InstrId: INNDNL2U2011091400 0011200003258 Txid: PA0110913629328 Msgld: NSCT1109140003240000 0000000000000001		APERSON IN THE NETHERLANDS	NOTPROVIDED	EUR	26.00	

### 2.1.5 Plan data generation: Batch support

The plan data for payment orders should match the respective booking logic concerning single or batch booking in order that the automatic reconciliation with account information works. For this, the following standard solution was implemented for the generation of batch or transaction plan data:

1. ISO-XML Formats: According to BatchBooking indicator
2. SWIFT MT101: Depending on field 21R
3. For all other formats according to the following rules:
  - a) Domestic payments with batches: Plan data for batches
  - b) Domestic payments with single records: Plan data for single records
  - c) Foreign payments: Plan data for single records

## 2.2 Optimised operation

### 2.2.1 Report-Engine/Print template

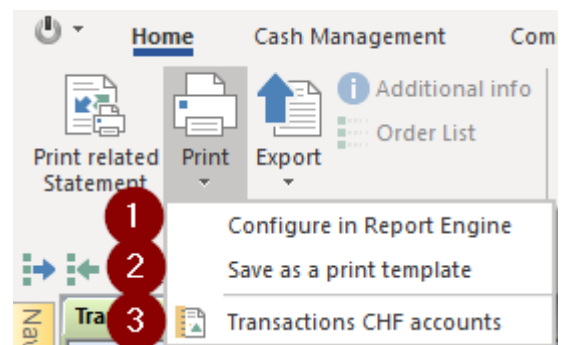
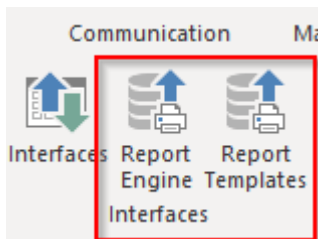
So far, the “Report Engine“ function has been used for the administration of two different concepts:

1. Output orders, which shall be automatically executed regularly independent from the respective user
2. Personal print templates, which each user can save for the manual execution

The combination of both concepts led to a high complexity level which has led to confusions. For this reason, the two functions had been now separated.

In the particular function,

- (1) printouts can be included in the Report Engine for the automatic execution
- (2) printouts can be saved as print template for the manual execution
- (3) saved print templates can be executed

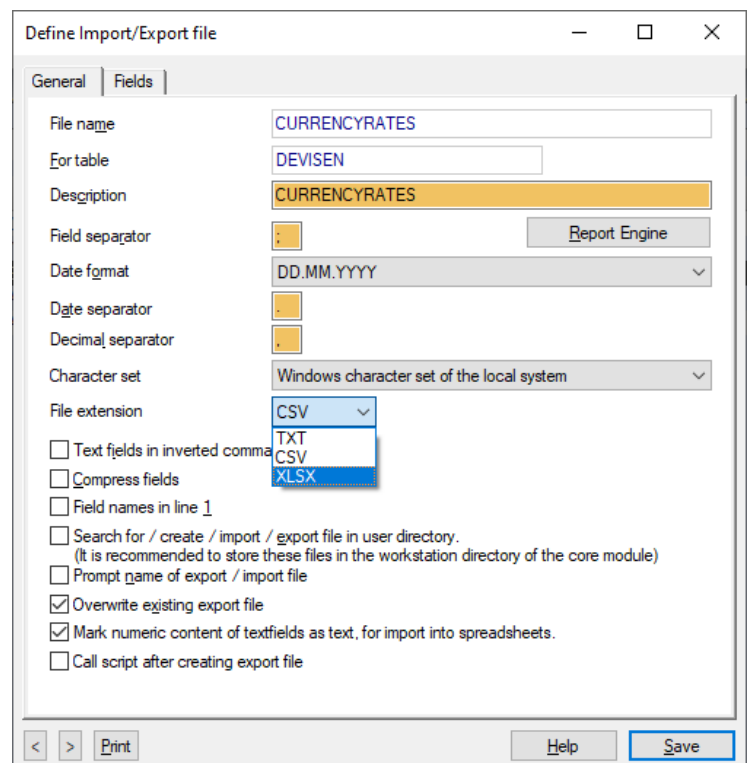


Analog to this, the administration functions were separated for this: For this reason, the number of possible options is reduced and the handling is significantly simplified.

### 2.2.2 Optimisation interfaces / data export

#### 2.2.2.1 Export: Directly into Excel (\*.xlsx)

The interfaces function was enhanced by a new output variant. Therefore, beside TXT and CSV, a direct export in the Microsoft Excel format (XLSX) is now also available:



### 2.2.2.2 New: Special Excel output: MyReports (additional module)

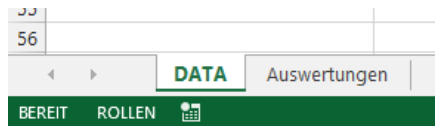
Data exports from MultiCash are often the basis for later evaluations. As a rule, the spreadsheet program Microsoft Excel is used.

To design the evaluation of MultiCash data in Excel more comfortable, easier and more efficient, a new function was implemented. This can be used to export data **directly in an existing Excel template**.

#### 1. Template definition

Important: The Excel template must have a tab with the name "DATA".

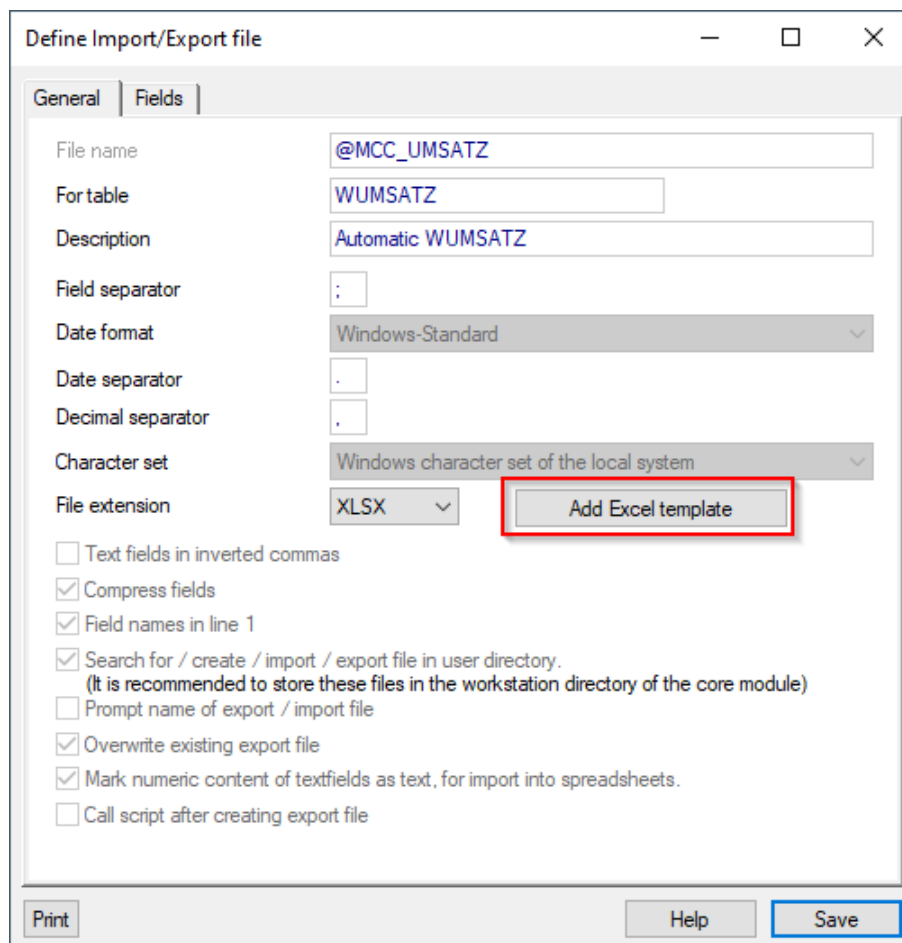
In this tab, the data from MultiCash are exported.



Additionally, as many other tabs as you like can be defined. As a result, automatic evaluations can be created based on the exported data.

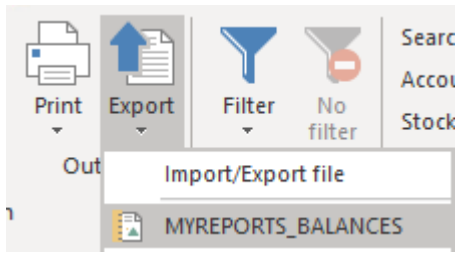
#### 2. Template upload

In menu item Interfaces, a new interface is created with the file name extension XLSX. Once "XSLX" has been chosen, a button appears for uploading the template:

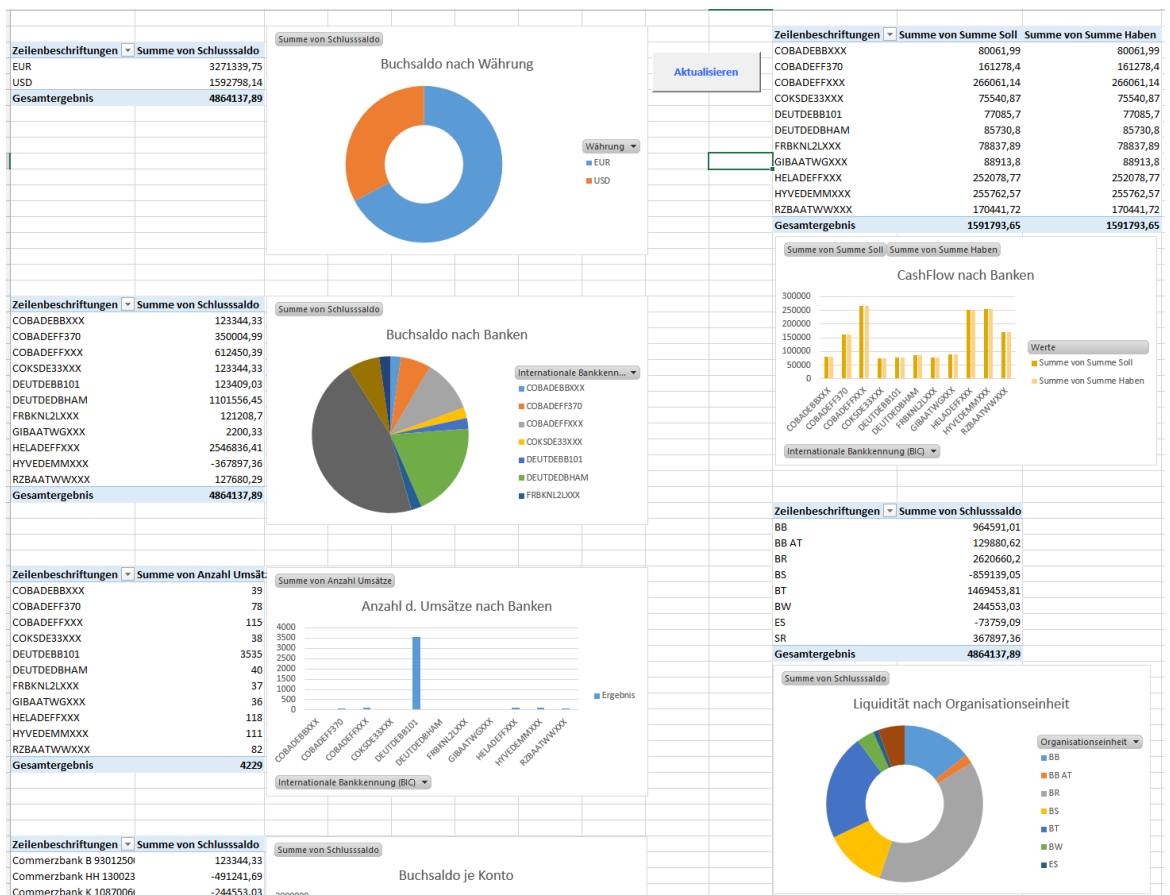


### 3. Template usage

The direct export in an Excel template is directly available in the appropriate menu item (split button), for which the interface was defined:



For example, balance information can be exported ("DATA" tab) and evaluated / prepared with the help of pivot tables and diagrams:






## 2.2.3 Communication Manager

### 2.2.3.1 Symbols for the identification of specific payments

Specific payment types are specifically identified with a symbol in the Communication Manager in the column Transaction type (analog to "i" for internal transfers):

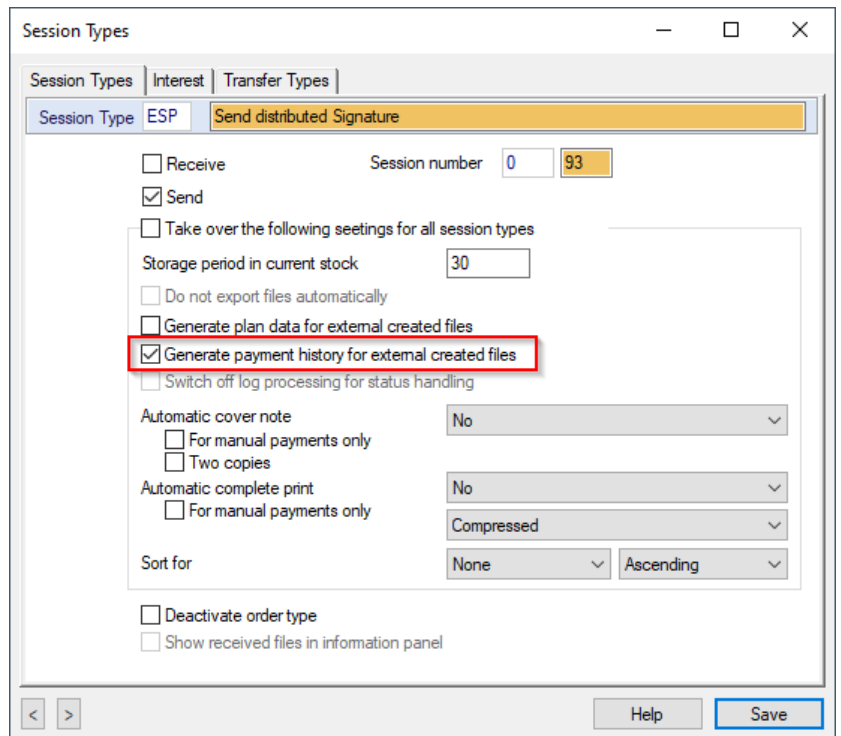
1. Internal transfer: "i" (as so far)
2. Manual payments (from the payment module): User Icon (NEW)
3. Embargo payments (from the Embargo module): Hierarchy Icon (NEW)

Session type	ONo	Status	Transaction type	Value date	Ordering party
<input type="checkbox"/> CCT	A0Z0	 Waiting for ES	SEPA Payments	01/05/21	Omikron Systemhaus GmbH 123
<input type="checkbox"/> CCT	A0T0	 Waiting for ES	 SEPA Payments	04/07/22	Omikron Systemhaus 1

### 2.2.3.2 Single payment history for DES orders

The transactions from payment files, which have been collected for the second signature using the Distributed Electronic Signature (DES), can be now also added to the transaction history.

This is configurable for the session type ESP:



Session Types

Session Types | Interest | Transfer Types

Session Type ESP Send distributed Signature

Receive Session number 0 93

Send

Take over the following settings for all session types

Storage period in current stock 30

Do not export files automatically

Generate plan data for external created files

Generate payment history for external created files

Switch off log processing for status handling

Automatic cover note No

For manual payments only

Two copies

Automatic complete print No

For manual payments only

Compressed

Sort for None Ascending

Deactivate order type

Show received files in information panel

< > Help Save

## 2.3 Communication

### 2.3.1 Transport encryption: Integration of TLS 1.3

By default, EBICS uses now TLS 1.3 as transport encryption if this is supported by the addressed server. For compatibility reasons, it will be switched back to older versions if necessary (e.g. TLS 1.2 as defined in the current EBICS Annex "Transport Layer Security").

### 2.3.2 New: EBICS 3.0 (additional module)

Version 3.0 harmonizes different EBICS variants and paves the way for a consistent communication for users in the international arena. For this, the following changes were defined:

- The previous bank-technical session types (or. OrderType attributes in the French EBICS) are replaced by the Business Transaction Format (BTF). As a result, it is now possible to transmit additional aspects concerning the data content and have therefore an impact on the processing of the payment on bank side. The BTF definition is made by the national specification committees of the banks and can contain the following attributes:
  - ServiceName: Basic type, for example SCT (SEPA credit transfer), XCT (foreign payment)
  - Scope: "Owner" for example country code AT, DE, FR or corporate IDs
  - ServiceOption: for example URG (urgent payment) or B2B (corporate direct debit)
  - ContainerFlag: Container type, for example XML, ZIP, SVC (Service Data Centre)
  - MsgName: Message format, for example mt101, pain.001, dtazv
- Electronic keys (Public Keys) are always transferred as X.509 certificate. The minimum length of different keys is enhanced to 2048-bit. A004-ES keys are no longer supported.
- The Distributed Electronic Signature (DES) can be comprehensively used with EBICS 3.0. For the previous versions, this was only common in the German variant.
- The text-based customer log (PTK) is dropped and replaced by the standardized and machine-readable HAC log in the XML format.

MultiCash can be enhanced from version 5.00 with the additional module EBICS V3 by the support of the new EBICS protocol version H005 (= EBICS V3.0) in parallel to the versions H003 and H004 (= EBICS 2.4 and 2.5) well-proven for years. In addition, BTF configuration packages enable the simple adaptation of a bank profile to all national BTF definitions of the members of the EBICS company, at present:

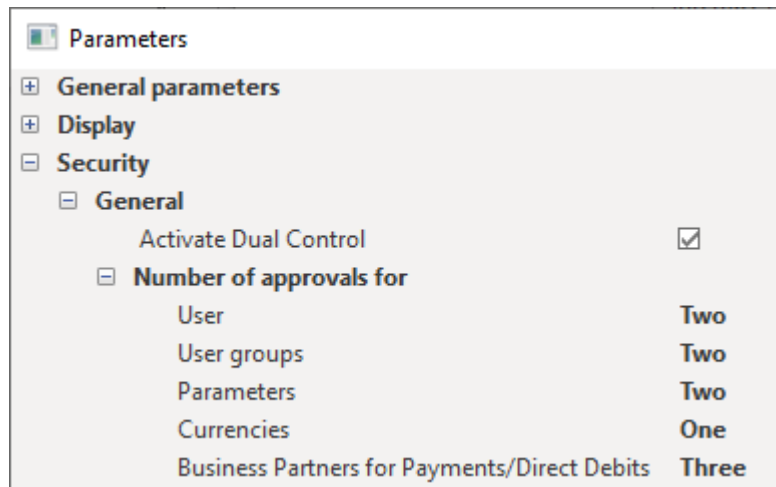
- Germany (issuer DK)
- France (issuer CFONB)
- Austria (issuer STUZZA/PSA)
- Switzerland (issuer SIX)

The screenshot shows the 'Bank Profiles' application window with the 'Parameters' tab selected. The profile name is 'EBXV30DE' and the description is 'EBICS Testbank V30 DE'. The 'Bank Information' section includes an 'Address (URL)' field with the value 'https://R-HKN6.tr.omikron.de/EBICS/' and a 'Verify Access' button. Below this, there are fields for 'Host ID' (TESTDEDE) and 'Client ID' (EBXV30DE001). The 'Protocol version' is set to 'H005' (highlighted with a red box). The 'Operating mode' is 'Standard' and the 'Authentication status of the bank' is 'Ready'. The 'National preference' dropdown menu is open, showing options: 'National DE Germany' (selected), 'Standard', 'National DE Germany', 'National FR France', 'National AT Austria', and 'National CH Switzerland' (highlighted with a red box).

## 2.4 Security in the Core module application

### 2.4.1 New: Master data changes: Asynchronous approval method and journal

As and when required, a so-called **“Dual Control Principle“** can be activated for defined relevant functions. The activation is made in the main menu under administration →Parameters and there in the Chapter **“Security“** → **“General“** → **“Activate Dual Control“**.



If the Dual Control Principle has been activated, the supported functions are displayed subsequently.

At the current point in time, a Dual Control Principle is supported **for the following functions:**

- (1) Users, (2) User groups, (3) System parameters, (4) Currencies, (5) Business Partners for Payments, (6) Jobs<sup>1</sup>, (7) Routing<sup>1</sup>, (8) Black-Whitelists<sup>12</sup>, (9) Screening rules<sup>12</sup>

*This concept can be extended to other functional areas, as and when required.*

For each function, you can then choose in a drop-down menu how many approvals are required for a change (required approvals: none, one, two, three).

→The initiator of a change can never approve his own changes.

The Dual Control Principle is implemented **asynchronously**. This means that (unlike in version 4.00) the second (/third / fourth) user does not need to approve the changes of the record immediately (synchronously) but that this can be made asynchronously **at a later point in time**.

As long as a change has not been yet confirmed with the required approvals, the changes made are not active. I.e. the **“old“** record is used until the final approval.

**Approvals** may be executed by all users who have the corresponding functional profile authorization for the particular function.

Each user can display the **current changes** as PDF. For this, a click on the **“Check“** button is sufficient. The current changes which have not been finally approved are then listed. In this check journal, it is also logged who has executed the current change at which point in time as well as possible approvals which has been already made (see also Chapter 4.3.1 **New: Approval method for Partner table**).

(28.07.2022, 14:03:28)

## Change list

Table Name	Record		
User	MLI		
Modification	User	Date	Time
	HERBERT KNEBEL R-HKN6	28.07.22	14:02
Field	before	after	
Administrator	No	Yes	
Group for functional profile	PMENTRY	ADMIN	

<sup>1</sup> Only product line MultiCash Transfer

<sup>2</sup> Only product line MultiCash Transfer and EMB Embargo module

After the final approval, this information is transferred to the general journal of the record. The **general journal** shows the **entire record history** incl. the initiators of changes, the persons who made approvals and the points in time of the particular action.

## Journal

(28.07.2022, 14:04:44)

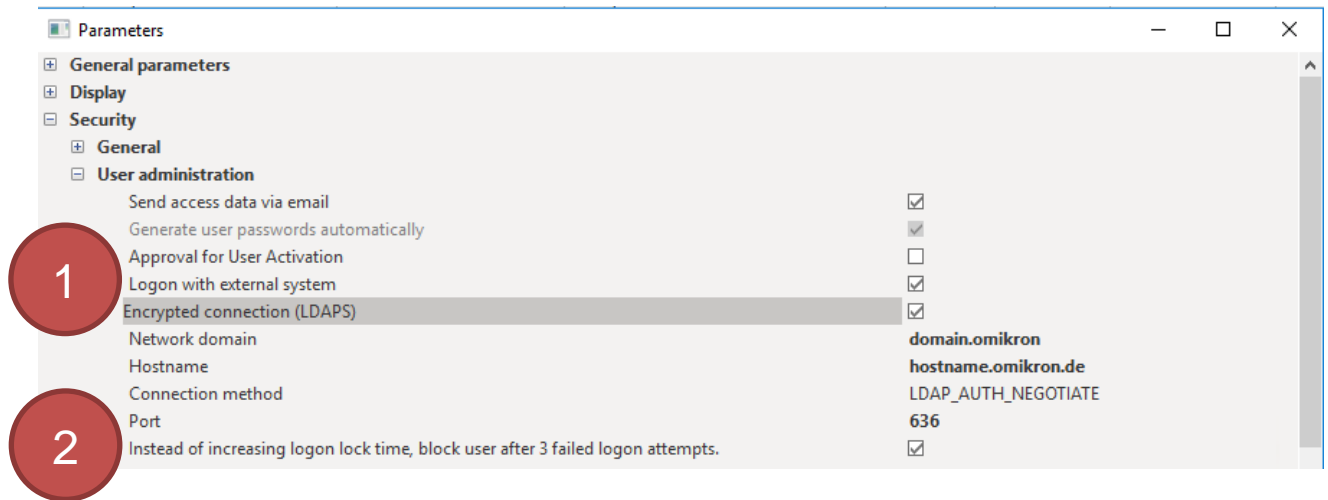
Table Name		Record	
User		MLI	
	User	Date	Time
Modification	HENRY KNIGHT R-HKN6	28.07.22	10:34:01:885
Approval	HERBERT KNEBEL	28.07.22	10:34:58:734
Field	before	after	
Name	<del>Markus Linden</del>	Marcus Linden	

Table Name		Record	
User		MLI	
	User	Date	Time
Modification	HENRY KNIGHT R-HKN6	28.07.22	12:15:17:005
Approval	HERBERT KNEBEL	28.07.22	13:57:25:698
Field	before	after	
Administrator	<del>Yes</del>	No	
Group for functional profile	<del>ADMIN</del>	PMTENTRY	

Table Name		Record	
User		MLI	
	User	Date	Time
Modification	HERBERT KNEBEL R-HKN6	28.07.22	14:02:53:415
Approval	HENRY KNIGHT	28.07.22	14:04:11:716
Field	before	after	
Administrator	<del>No</del>	Yes	
Group for functional profile	<del>PMTENTRY</del>	ADMIN	

## 2.4.2 Logon: LDAPS and blocking after failed logon attempt

In this area, two new options were implemented:



- (1) Logon to the Domain Controller: Support of LDAPS  
For this reason, enhanced protection against spying of login credentials.
- (2) Logon: Blocking after 3 failed attempts (switchable)  
By default, a user access is assigned an increasing logon lock time at each new failed attempt after more than 3 failed logon attempts so that a "Brute-Force" attack does not make hereby any sense.

However, some security concepts require a blocking of the user after several failed attempts. For this reason, a new system parameter is implemented in Chapter Security/User administration:

Instead of increasing logon lock time, block a user after 3 failed logon attempts: [Y/N]

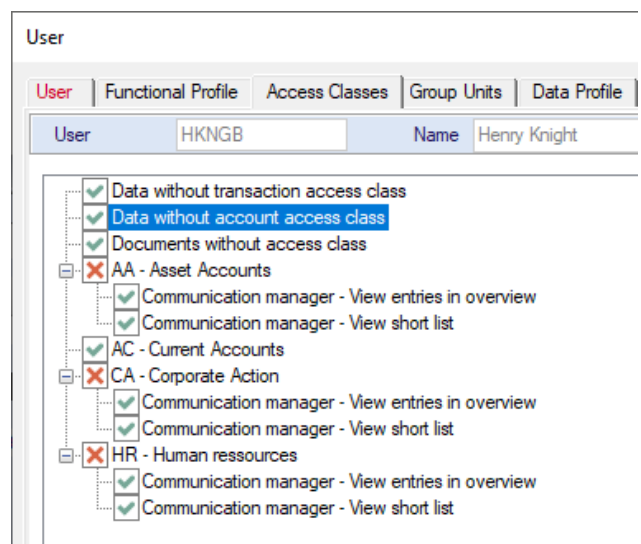
**Note:** Before you choose this option, please keep in mind that hereby an attacker can block with simple means all user accesses of a system. I.e. successful "Denial of Service" attacks become possible.

## 2.4.3 Enhancement of the "Access classes" concept for accounts and documents

Some bank accounts are subject to organisational restrictions so that a user may not use these accounts. This can be defined by the organisational structure (for example defined areas of the group hierarchy) but also by specific usage concepts which cannot be derived from this. The same applies to documents which are attached to master data or transactions.

Therefore, the well-proven access class concept so far applied only to transactions is enhanced by access classes for accounts and documents:

1. The access classes profile in the user administration receives two new options for accessing accounts and documents without access class allocation.



2. One access class can be entered in each case in the account master record and for document allocations.
3. The transaction tables with account relation (e.g. communication manager) can be now allocated to a transaction and account access class.

When accessing data, as usual the access class profile of the user is checked. For transaction data with account relation, the user must be authorized for both access classes in order that the record is displayed.

**Note:** When using the account access class, we strongly recommend to activate for the payment modules the parameter "Only one logical file per payment file". Because only one access class can be allocated to one payment file even if it contains several ordering party accounts.

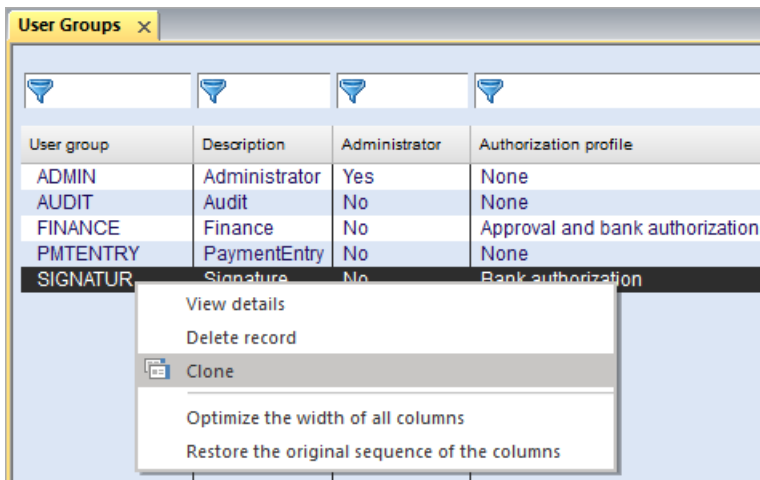
#### **2.4.4 Separate authorisation for new entry of collection / send orders**

For larger companies, a manual new entry of payment files shall often not be allowed for each user. If applicable, other rules apply to the creation of collection orders.

Therefore, the profile entry "New admission" is now only valid for new sending jobs. A new profile entry "New admission Collection Orders" has been introduced for new download jobs (deactivated after the update).

## 2.5 Administration/Organisational issues

### 2.5.1 User administration: Clone users/user groups



User group	Description	Administrator	Authorization profile
ADMIN	Administrator	Yes	None
AUDIT	Audit	No	None
FINANCE	Finance	No	Approval and bank authorization
PMENTRY	PaymentEntry	No	None
SIGNATUR	Signature	No	Bank authorization

Context menu options:

- View details
- Delete record
- Clone
- Optimize the width of all columns
- Restore the original sequence of the columns

The maintenance of extensive access rights profiles is now significantly simplified by the option to “clone” existing profiles:

### 2.5.2 New: Internal communication: “Broadcast” function

A new menu item “Administration” → “Software” → “Broadcast” was implemented. This allows messages to be created which are displayed then to the addressed users in the 'Information' panel.

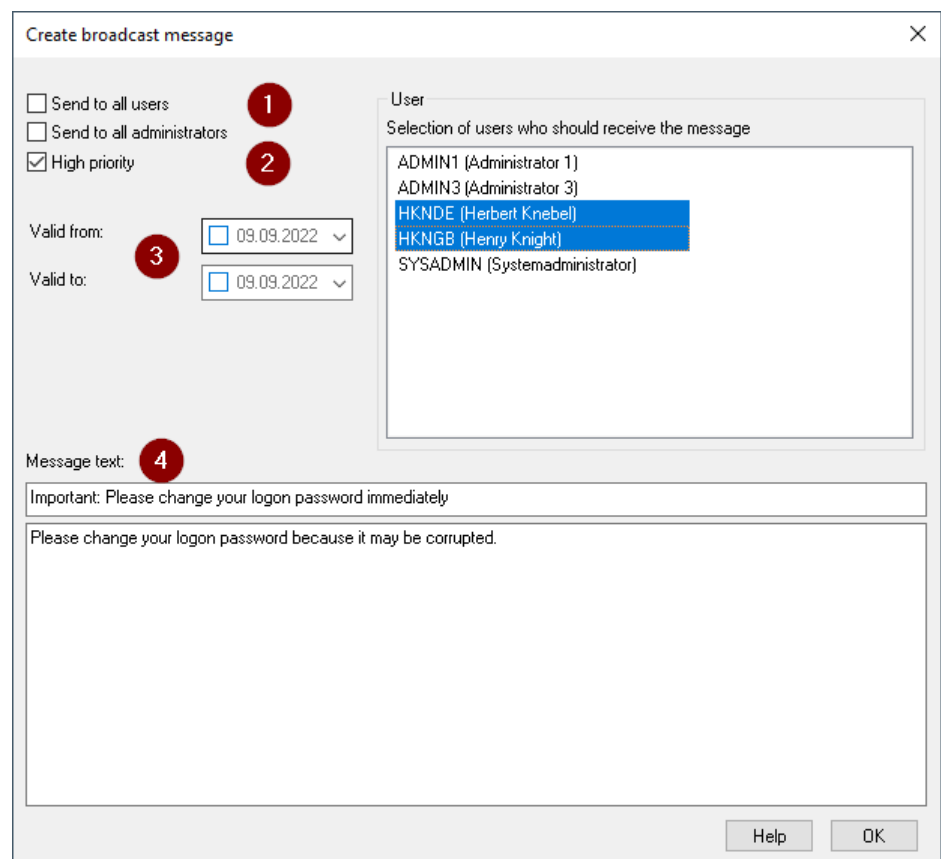
(1) Addressing: Here, the following variants are supported:

- All users
- Selected users
- All administrators

(2) Priority: If the message is sent with high priority, it must be confirmed by the addressee before he can use the application.

(3) Interval for the display: An interval can be defined for the display.

(4) The message consists of subject and text.



**Create broadcast message**

Send to all users (1)  
 Send to all administrators  
 High priority (2)

Valid from: (3)

Valid to:

User Selection of users who should receive the message:  
 ADMIN1 (Administrator 1)  
 ADMIN3 (Administrator 3)  
 HKNDE (Herbert Knebel)  
 HKNGB (Henry Knight)  
 SYSADMIN (Systemadministrator)

Message text: (4)  
 Important: Please change your logon password immediately  
 Please change your logon password because it may be corrupted.

## 2.5.3 Flexibilised archiving concept

### 2.5.3.1 New option for history "Short term/Long term"

For the functions

1. System log
2. Account information
3. Communication manager → Payment history

a new archiving cycle "Short-term/Long-term" is implemented. This allows historical data to be administered in two configurable archives which makes the access easier:

Short-term archive: Storage time set fixed to the current year and the previous year.

Long-term archive: The parameter "Storage period for history" is interpreted as 'Years' for the storage period of the long-term archive.

### 2.5.3.2 New: Parameter "Storage period"

This new parameter (Monthly / Quarterly / Semi-annually / Annually) allows the archive period to be separated from the execution of the archiving. This means that the archiving is not executed daily as before, but only at the defined period changes.

### 2.5.3.3 New: Parameter „Archive if older than ... plus x periods“

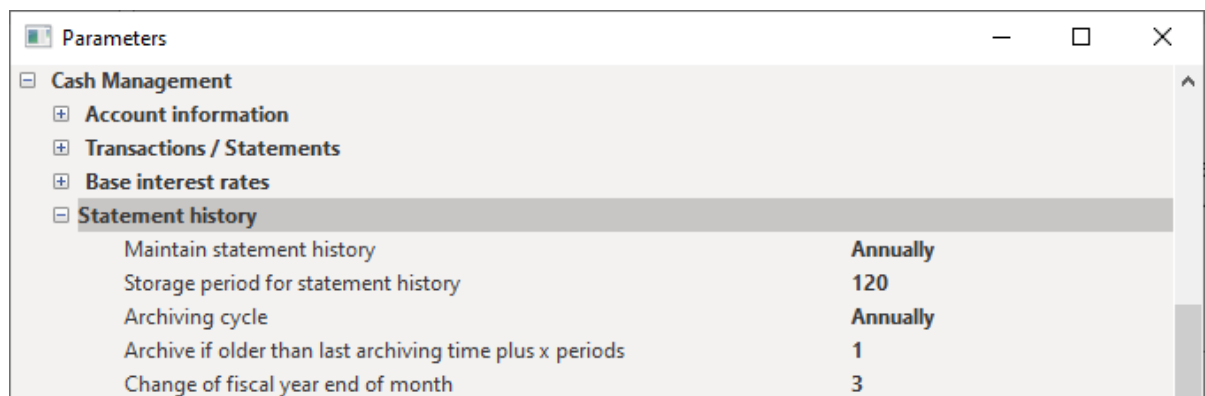
The new parameter "Archive if older than last archiving time plus x periods" can be used to separate storage in the current stock from archiving in order to hold data from the current and previous periods in the active data stock.

### 2.5.3.4 New: Parameter „Change of fiscal year by end of month“

Damit können im Archiv Daten zu Geschäftsjahren verwaltet werden, die vom Kalenderjahr abweichen.

This allows to handle archive periods for business years that differ from the calendar year.

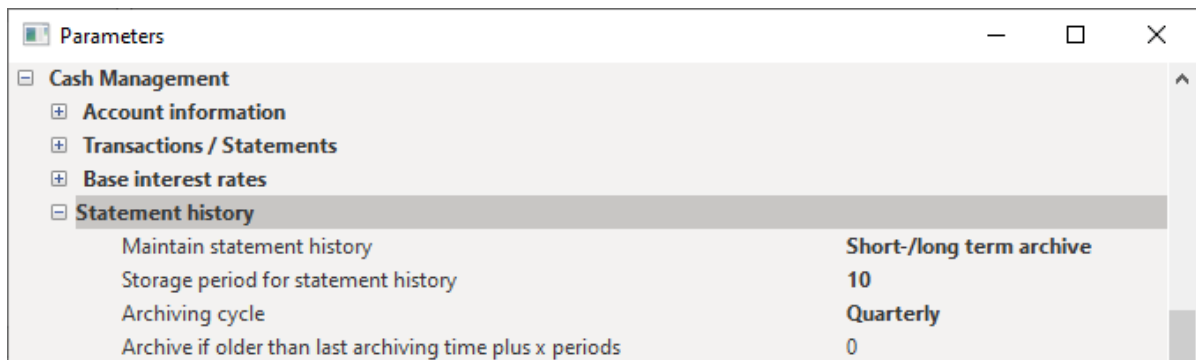
### 2.5.3.5 Example: Archive structure by fiscal year



Parameter	Value
Maintain statement history	Annually
Storage period for statement history	120
Archiving cycle	Annually
Archive if older than last archiving time plus x periods	1
Change of fiscal year end of month	3

- (1) Archive structure: Annually, here because of parameter (5) from 1.4. to 31.03. of each year.
- (2) Storage period of data in archive: 120 months, i.e. 10 years.
- (3) Moving the data from the current stock to the archive annually, in this case on 1.4. because of parameter (5).
- (4) Moving data if older than the year before last. This means that the data of the current and the previous fiscal year remain in the current stock.
- (5) The fiscal year changes here on 31.03.

### 2.5.3.6 Example: Archive structure short -/longterm archive



- (1) Archive structure: short-term/long-term archive
- (2) Storage period of the data
  - a) Short term archive: fixed current and previous calendar year
  - b) Long term archive: 10 years
- (3) Moving data current stock → short term archive → long term archive: Every quarter

### 2.5.4 Module-specific installation of session types

So far, all session types were centrally delivered with the core module. For this reason, an update of the core module was always necessary when implementing a new module with own session types. In future, module-specific session types will always be delivered together with the particular module (especially with format sub-systems) so that changes or enhancements in this area can be made without any update of the core module.

### 3 XML Messages according to ISO 20022 Version 2019

MultiCash will support in generation 5.00 the conversion to ISO 20022 Version 2019 based on the new specifications of the particular definition committees. The following principles apply in this process:

#### 3.1 Account information and Payment Status Reports

So far, the application interprets account information and Payment Status Reports according to ISO-schema Version 2009 (camt.05x.001.02, pain.002.001.03). In addition, within the framework of the software maintenance from Release 4.00.008, Service Pack 8 and 5.00.001 account information according to ISO-schema V2019 (camt.05x.001.08, pain.002.001.10) is supported analog to the previous functional range.

#### 3.2 Format sub-systems

The format sub-systems for messages according to ISO 20022 are currently based on Version 2009 (pain.001.001.03, pain.008.001.02), in particular

- SEPA orders (SPA-SUB module) and
- National foreign payments and international orders in the ISO format (XCT-SUB module).

These modules are also enhanced within the framework of the software maintenance by the support of ISO messages according to Version 2019 (pain.001.001.09, pain.008.001.08).

Step by step, these implementations are made on the basis of the releases of responsible specification groups to be expected in later software releases.

#### 3.3 Message creation (payment module, converter)

In future, the creation of payment orders will be made in a central payment module (see Chapter 4 **Payment administration**) or converters on the basis of set of rules which are delivered in "Payment Packages" per procedure and version. Also here, the ISO-Version 2019 must be gradually supported in parallel to version 2009.

For this, on the basis of the upcoming releases of responsible specification groups, corresponding upgrade licenses to version 5.00 are offered per product line.

In some countries, the national order formats are step by step replaced by messages according to ISO 20022 with country-specific usage. Corresponding modules are also offered for this, ensuring a smooth transition (e.g. for the German Foreign Payments in the ISO format).

## 4 Payment administration

### 4.1 CGI Module: Smart Payment Window for all payment methods

The methods for transmitting payment orders from bank customers to his banks are undergoing radical changes. On the one hand, international banks are offering their customers order submission for many countries in a single XML format according to the concept ISO 20022 Common Global Implementation (CGI). On the other hand, national message formats still exist, replaced only step by step by ISO-XML messages. However, these processes do not run synchronously in terms of content and timing. As a result, for many years, the support of many different message variants and versions can be expected, including a permanent need to make changes.

For this reason, a new payment module "CGI" has already been implemented with MultiCash Version 4.00, which supports as "Smart Payment Window" all required payment formats in a data and functional model:

- National order specifications
- SEPA
- SWIFT MT10x Messages
- International templates according to ISO 20022
- Bank-specific CGI variants and national ISO specifications

From Version 5.00, this module replaces all previous MultiCash payment modules.

#### 4.1.1 Integrated concept

The CGI module is a standardised "framework" for processing payments. This covers the following aspects based on an integrated and modular concept:

##### 1. Functionality

- a) Manual payment entry or data import for all methods in one application
- b) Automatic detection of the order format agreed with the ordering party bank from transaction data
- c) Dialog control and plausibility check according to the rules of the chosen order format which makes an intuitive and consistent usability concept possible
- d) Message creation in the chosen order format

##### 2. Modularity

The module can be simply enhanced by

- a) "Payment Packages", which include the "set of rules" for payment methods and control for this reason the specific usage rules and plausibility checks
- b) "Format sub-systems" to read and write specific message formats

##### 3. Maintainability

When changing a payment method, only the "Payment Packages" and "Format sub-systems" required for this are updated.

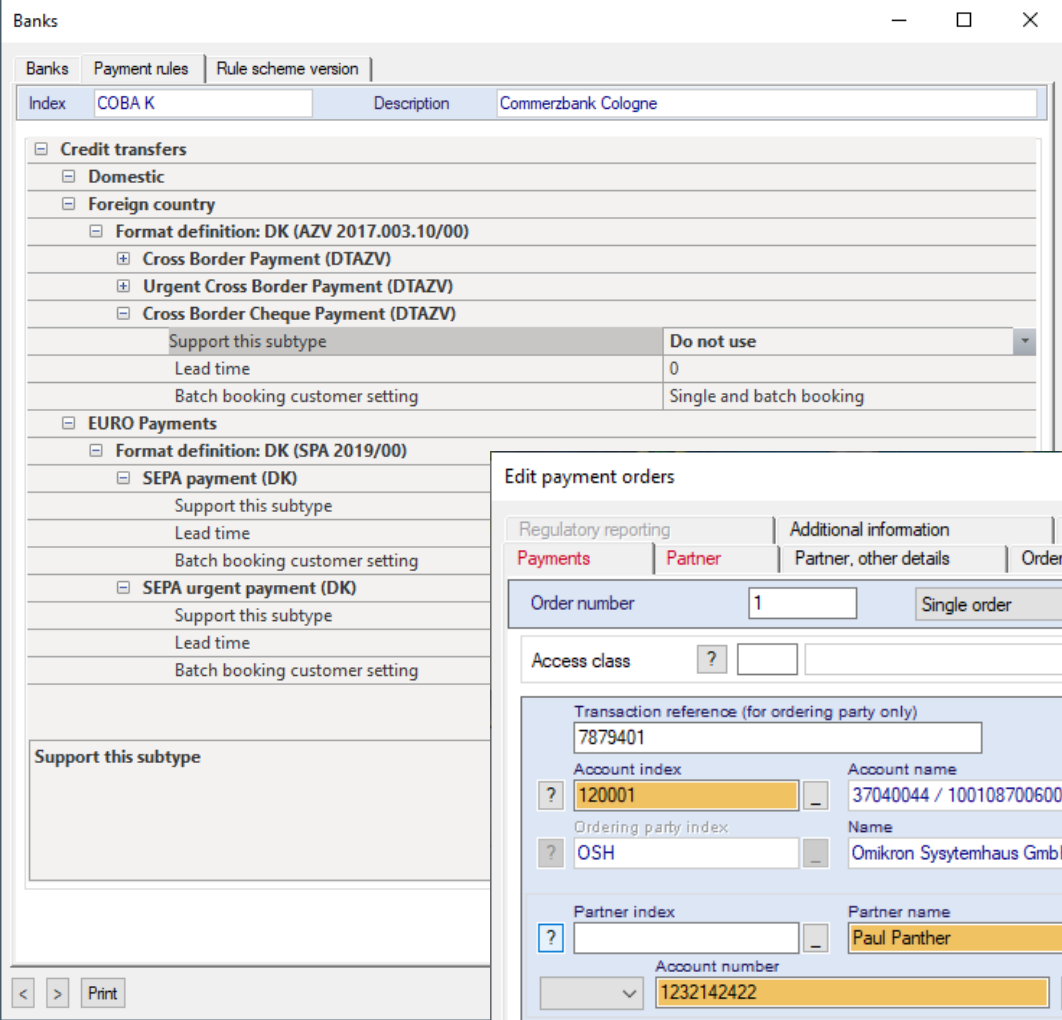
#### 4.1.2 Update of payment modules

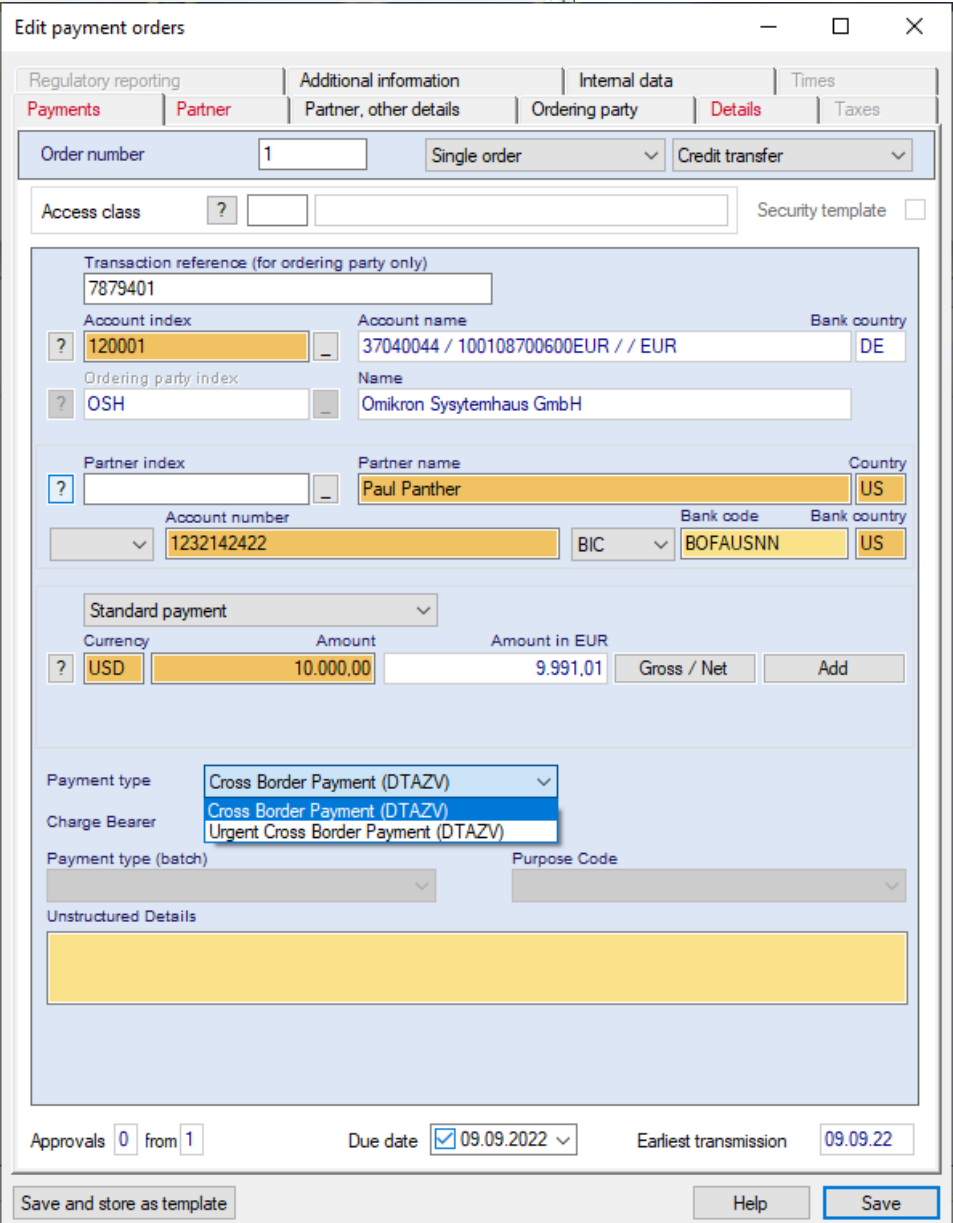
Licenses for payment modules of Version 4.00 will be replaced using the update to Version 5.00 by the CGI module and the respective Payment Packages/Format sub-systems for this. Examples:

Method	Components V4.00	Components V5.00
	Any payment module	Payment module CGI
SEPA	Payment module SEPA Format sub-system SPA-SUB	Payment Package DK-SPA Format subsystem SPA-SUB
DTAZV	Payment module German AZV Format sub-system AZV-SUB	Payment Package DK-AZV Format sub-system AZV-SUB
DK-AZV XML (new)		Payment Package DK-AZV-XML Format sub-system XCT-SUB

When updating the software from Version 4.00 to Version 5.00, the reference and transaction tables of all payment modules are automatically imported into the CGI module. The specific payment modules are uninstalled.

The payment rule schemes from the particular Payment Packages are allocated to account-holding banks:





When entering an order, the payment types activated for the account-holding bank are offered for selection.

## 4.2 Functional changes and enhancements

### 4.2.1 Handling of "Ultimates"

From the view of the accounting department of a company, the contracting partners of the business are relevant, from which a payment results and not the holders of the bank accounts, between those it is settled.

The ISO 20022 concept is defined from the view of the banks and the account holder is always called "Creditor" or "Debitor". If i.e. the account holder (=bank creditor/debitor) is another one than the accounting creditor/debitor, the account holder is entered in the message item "Creditor" or "Debitor" whereas the accounting creditor/debitor must be entered in the message item "Ultimate Creditor" or "Ultimate Debitor".

In previous versions, the ISO concept was mapped in the database and the application dialogs. However, customers who work with "Ultimates" could not find again their creditors/debitors in the payment history and other functions because, if applicable, the ultimate holders of bank accounts were displayed there instead of the contracting partners. For this reason, the application layer shows now the view of the corporate accounting, i.e. always the contracting partners in the fields Ordering party and Partner even if the account holders are different.

However, the payment message is correctly filled or interpreted according to the ISO concept.

### 4.2.2 Batch orders

Batch orders allow several payment orders to be combined in an “order batch“:

So far, this option was only offered in the SEPA and RFT module because these methods support batch bookings. In the new CGI payment module, a batch administration can now be used for all payment types because this offers multiple advantages:

- Summary of orders from a working process under a batch name
- Grouping of orders from a file import
- Simple change of execution date or ordering party account for all contained orders
- Specific aggregation of orders in a file/a batch
- Allocation of a batch reference

**Batch**

Batch type: Manual capture

Batch number: 1    Credit transfer    CCT

Batch name: Invoices week 40    Batch

No. of orders: 1    Total of orders: 12.330,00

Region: SEPA    Land beauftragte Bank: DE

Access class

?

Account index: 120001    Account name: 37040044 / 100108700600EUR // EUR

Account holder index: OSH    Account holder name: Omikron Sysytemhaus GmbH

Ordering party index: OSH    Ordering party name: Omikron Sysytemhaus GmbH

Format definition: DK SPA

Category Purpose

Currency: EUR    Reference: 736600845979864

Batch: Orders for batch Invoices week 40

Order number	End-To-End Reference	Partner index	Partner	Amount	Currency
2	736602006682779	MÜLLER	Müller KG PBNKDEFFXXX / DE39 3701 0050 0081 0045 05	12.330,00	EUR
3	736602680016855	OTTO KG	Gebrüder Otto KG PBNKDEFFXXX / DE39 3701 0050 0081 0045 05	23.330,00	EUR
4	736602704627430	PORR	Porr Gesellschaft für Straßen und Tiefbau AG GIBATWWXXX / AT12 2011 1000 0045 9534	34.440,00	EUR

## 4.3 Security in the payment module

### 4.3.1 New: Approval method for Partner table

For the Partner table, the approval method can be activated, which is described in Chapter 2.4.1 **New: Master data changes: Asynchronous approval method and journal.**

If this parameter is activated, new entries, changes and deletions become only activated in the Partner table after the required approvals by users who are authorised for this. To do so, the following functions are available:

- (1) Check: Shows the change list with detailed changes pending for approval
- (2) Reject: Changes are rejected
- (3) Approve: Changes are approved

Partner
— □ ×

Partner
Intermediary bank / Identification
Ultimate account holder / Delivery cheque to
Additional information

Index OTTO KG

Contracting party

Name	<input style="width: 90%;" type="text" value="Gebrüder Otto KG"/>	Company <input checked="" type="checkbox"/>
Street	<input style="width: 90%;" type="text" value="Teststraße 33"/>	
Town	<input style="width: 90%;" type="text" value="Köln"/>	
Postcode	<input style="width: 90%;" type="text" value="50829"/>	

## Change list

(31.10.2022, 12:23:13)

Table Name	Record		
CGI-Partner	OTTO KG		
Modification	User	Date	Time
	HERBERT KNEBEL R-HKN6	31.10.22	12:21
Field	before	after	
Street	Teststraße 33	Hafenstraße 44	
Post code	50829	50833	
BIC	PBNKDEFFXXX	COBADEFFXXX	
Account number	DE39370100500081004505	DE89370400440532013000	
Bank name	DEUTSCHE-POSTBANK AG	COMMERZBANK AG	

Plansatz für Gegenbuchung

Account name

Group unit ?
1
2
3
-

<
>
Print
Journal
Change
Check
Reject
Approve
Help
Save

### 4.3.2 New: Security Templates

Many companies wanted to have the option to allow the manual entry of payment orders only based on “Security Templates“. This option was implemented as follows:

Security templates are entered similar to the well-known templates and must be approved before the use by authorised users. If payments are entered on the basis of such a security template, changes are only allowed in the payment order for the following data fields:

- Amount
- Details
- Order reference

In the order administration, orders from security templates are marked accordingly so that this can also be taken into account in the “mixed mode“ when approving payments.

In the functional profile,

- (1) entering payments can be limited to the use of security templates
- (2) entering and approving security templates can be controlled

