CBF Fileservice – Migration to ClearstreamXact

Customer Simulation Guideline

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1. Introduction

Clearstream Banking Frankfurt (CBF) will offer a Customer Simulation period dedicated to the migration of the CBF Fileservice to ClearstreamXact for business day **2 May 2023**. The functional details about the migration are available in Announcement <u>D22076</u>.

As from **20 February 2023, 07:00, until 21 February 2023, 06:00**, to ensure a broad test scope, files created in production on these days will be snapshotted and made available in the Clearstream Banking Luxembourg (CBL) test environment (OCCT) for Xact Web Portal.

In the period from **27 February to 24 March 2023** customers can retrieve the snapshotted files for their analysis and testing. Furthermore, CBF's Customer Simulation environment (IMS23) will be open for regression testing, so that customers can generate new reports to be retrieved in OCCT for Xact Web Portal and in CBF Fileservice test environment HOST Fileservice.

Customers wishing to participate in this guided simulation are asked to register. Registration is required so that the required configuration can be set up in the CBL test environment (OCCT). The form will be made available in time on the Clearstream website. The registration period for the participation in the simulation will end on **17 February 2023**.

The participation in the CBF Guided Simulation is optional and not a prerequisite for admission to production for the launch date of the migration on 2 May 2023.

2. Scope of Customer Simulation of the CBF Fileservice migration

In line with the functional descriptions in Announcement <u>D22076</u>, CBF will offer a guided Customer Simulation from 27 February to 24 March 2023 in two ways:

• Snapshot of Productive Data

On 20 February 2023, 07:00, until 21 February 2023, 06:00, to ensure a broad test scope, all the files present in the CBF Fileservice portal will be snapshotted and then transferred to Xact Web Portal in the CBL test environment OCCT. From 27 February to 24 March 2023, customers registered for the guided Customer Simulation will need to have access to the CBL test environment OCCT and will be able to read and download these files for their simulation and analysis. Deviating from the start in production, compressed files in ZIP format are also provided, as they are subject to the current setup.

• Simulation files based on regression tests

Furthermore, from 27 February to 24 March 2023, IMS23 will be open for regression testing, so that customers can generate new reports to be retrieved in both portals. All files offered in the scope of services of IMS23 will be transferred to OCCT and to HOST Fileservice.

3. Preparation of the Guided Customer Simulation

3.1 Getting ready for Customer Simulation

During the simulation period for the CBF Fileservice Migration to Clearstream Xact, customers will be able to retrieve reports currently generated for the CBF Fileservice in different testing environments:

- **HOST Fileservice** for the CBF Fileservice via the Deutsche Börse AG web portal, if the customer requested the setup for simulation activities in the past;
- **OCCT** for Xact Web Portal.

The content and format of the reports will be identical in both environments, whereas the file names will differ. In HOST Fileservice, the currently valid names of the files as in the CBF Fileservice will be used. In OCCT, they will be identical to those of the future production. Regarding the new naming convention, please refer to Announcement D22076.

There will be two different types of files available, if there is a valid report subscription in the related file service environment available:

- Reports based on productive data snapshotted on 20 February 2023, 07:00, until 21 February 2023, 06:00, in CBF Fileservice;
- Reports based on simulation data generated by regression tests of the customers in IMS23.

OCCT and IMS23 are used simultaneously for other Clearstream testing activities. Customers are requested to consider that a coordination of different test requirements and various test executions during the simulation period for the CBF Fileservice Migration to Clearstream Xact is strongly recommended at customers' premises.

For a successful participation in the Customer Simulation allowing the read and download of reports, access to Xact Web Portal in **OCCT** is mandatory. If a customer aims to execute regression tests on their demand, account and connectivity settings must be available in Customer Simulation environment **IMS23**. The static data for CBF accounts and related connectivity settings from the previous simulation period will be reused.

Please contact:

- The Connectivity Support team for simulation activities (connect-test@clearstream.com), if:
 - o The account and connectivity settings in Xact OCCT need to be verified.
 - The customer has not registered for the previous customer simulations and requires a setup in Xact OCCT.
- The Connectivity Support team (connect@clearstream.com), if:
 - o The account and connectivity settings in IMS23 need to be verified.
 - The customer has not registered for the previous customer simulations and requires a setup in IMS23.
- The SECU Helpline of Deutsche Börse AG (secuadmin@deutsche-boerse.com), if:
 - The access to CASCADE needs to be reset.
 - o The account and connectivity settings in HOST Fileservice need to be verified.
- The experts of the Customer Readiness team (<u>T2S-Support@clearstream.com</u>), if there are particular setup requirements related to the CBF Fileservice Migration Customer Simulation in February and March 2023.

3.2 Snapshot data

The objective of the snapshot is to enable production-like test data. The snapshot is extracted from the CBF Fileservice on the following business days: from 20 February 2023, 07:00, to 21 February 2023, 06:00.

The production-like test data will be made available in the testing period from 27 February to 24 March 2023 in OCCT allowing the verification of the data via Xact Web Portal.

In order to provide all the productive files snapshotted on 20 and 21 February 2023, compressed files in ZIP format will be available in OCCT. Please note that this is only done for the guided Customer Simulation. After migration to the production environment of ClearstreamXact on 2 May 2023, files in ZIP format will no longer be created.

3.3 HOST Fileservice functionality – Connectivity channels

Different to production, during Customer Simulation the Fileservice data available on HOST Fileservice can only be retrieved via the web portal of Group Deutsche Boerse. The connectivity media "Direct", "NJE" and "CA-spool" are not supported in simulation.

Access is available under:

<u>www.deutsche-boerse.com</u> / Logins / More Logins / Market Data + Services / Host file service or via direct link:

https://deutsche-boerse.com/dbg/app/open/hostfileservice?lang=en

For customers that already have access to HOST Fileservice, no action is required as credentials remain unchanged. Due to the migration activities, new access rightes cannot be granted to this environment any longer. This applies to account and user settings.

3.4 CBF Fileservice reports for simulation

As in the past, via HOST Fileservice, a reporting will be provided in future via Xact OCCT. Based on the migration concept, modified report names will be applied. Whereas in the past, customers could ask for dedicated test reports on their demand, this option will not be available in OCCT.

Please find below the reports that are dedicated to testing:

Modified Report Name Xact OCCT			
Anforderungsdaten KCSL			
CASCADE Tageslisten			
Depotbestand Inland (online request)			
Avise			
Depotbestandsliste Inland (BST)			
Gesamt-Regulierungsliste			
Regulierungsliste			
Depotauszüge Inland			
Taxbox Outbound Messages			
Xemac Reports			
Pre-Advice			
Sammellastschrift Länder			
Taxbox Routing Tabelle (currently not supported)			

Table 1: List of Modified Report Names

3.5 Retention periods

In general, reports will be available for downloading in a predefined period ("Retention Period"). This period can take up to 365 calendar days. More details about the retention period applicable to a specific report can be found in Announcement D22076.

In OCCT, the retention period will bear the same period as in production or as today defined in HOST Fileservice for dedicated test reports.

Please note that once the retention period has passed, the reports cannot be retrieved in the environment any longer. Different to production, in OCCT no archiving procedure is in place. Therefore, if the report cannot be retrieved anymore, the test case cannot be executed as the information has been physically deleted. Customers are recommended to keep in mind this detail when planning their activities for snapshot and regression testing.

3.6 CASCADE Online functionality – Login procedure

Due to increased security regulations, the behaviour of the IMS systems of Deutsche Börse AG was modified when incorrect login data is entered. This means that after five unsuccessful login attempts due to, for example, incorrect access data, the user will be blocked. As soon as a login attempt is successful, the counter is reset and five attempts to log in can be made again.

If all five login attempts fail, the user is blocked and the error message "FY00211" will be displayed.

To reactivate the user, the customer must contact the administrator at Deutsche Börse (). The unblocking cannot be initiated by the Secu-Administrator nominated in the customer's institution.

The administrator of Deutsche Börse will inform the customer as soon as the user has been successfully unlocked. This reactivation takes about 24 hours. After that, the customer can log in with the previous ("old") password.

3.7 CBF Customer Simulation environment (IMS23): Connectivity channels

For the message exchange via the Swift network, Swift requires the use of Test BICs as technical sender and receiver addresses within its testing environment. The Test BIC must be registered with the Swift network. If customers wish to participate via a Test BIC for the first time, they should allow some time for the preparation of the technical setup by Swift, RMA key exchange and connectivity tests.

For the message exchange via File Transfer and MQ, the production sender / receiver addresses are to be used, since only production addresses are allowed in the CBF connection to T2S.

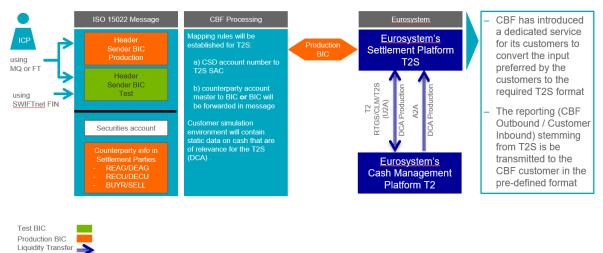


Figure 1 - Message flow during the testing

Technically, CBF customers can send instructions to the CBF Customer Simulation environment (IMS23) by using the production BIC DAKVDEFFXXX in the header or the CBF Test BIC ZYDGDEF0DOM when they instruct via File Transfer or MQ. Via Swift, BIC ZYDGDEF0DOM must always be used. If a customer wants to send an instruction to a test system via File Transfer, the message has to be identified as not being for production. This is done by a TNG trailer at the end of the instruction: ä5: äTNG: üü

The trailer is used for CBF replies to customers, too. This guarantees that CBF test messages can clearly be identified, so that the customer can avoid injections into the customer's production system.

The CBF customer Swift addresses used in their messages to CBF are applied by CBF to create the T2S actor reference for DCP eligible instruction types. If the Swift address is a Test BIC and linked to an account with T2S Party BIC, this BIC is used when forwarding the messages to the T2S platform.

In order to set up the required connectivity channels, it is required as in production to request the settings in advance. The required order forms are available via the <u>Clearstream website</u>. Please contact the Connectivity Support team (<u>connect@clearstream.com</u>) if connectivity settings in IMS23 need to be verified.

3.8 CBL test environment (OCCT): Connectivity channels

In light of the CBF Fileservice Migration to ClearstreamXact, an upgrade of the "Report details" via Xact Web Portal is introduced.

Ensuring a retrieval of files in Xact Web Portal via OCCT customers are requested to check as of **20 February 2023** if the testers have sufficient access and the necessary new user rights.

If a third-party service provider retrieves the reports for their client(s), then only the service provider is expected to test. Registration forms filled in by clients of third-party service providers will not be accepted.

Please contact the Connectivity Support team (<u>connect@clearstream.com</u>) if connectivity settings in OCCT need to be enriched for the Customer Simulation.

4. Preparation test execution

This chapter provides a detailed description of dedicated test cases for the Customer Simulation during the period from 27 February to 24 March 2023. Each of the following sections provides a short summary of the modifications. The detailed functional specifications are available in Announcement D22076¹:

If CBF requires information from the customer for a successful test execution, these prerequisites are defined in the following.

4.1 Customer Simulation Registration Form

Customers interested in participating in the CBF Fileservice Migration Customer Simulation are requested to complete the CBF Customer Simulation Period (February and March 2023) for the CBF Fileservice Migration Registration Form. CBF will use the "Single Point of Contact (SPOC)" concept. Therefore, customers are requested to define a coordinator and deputy coordinator for the Customer Simulation who will receive all relevant information and updates, if necessary. The "SPOC" is kindly asked to inform their test team responsible for Customer Simulation activities accordingly.

Allowing for a proper execution of the Customer Simulation, CBF requests dedicated account and user information in the registration form. Customers need to define the account masters and the users who need access to the test environments and platforms and if regression tests are planned.

Based on the information provided in the registration form, Clearstream will create necessary settings in IMS23 and OCCT, if a customer requires an update of the static data for accounts and / or the related connectivity settings.

4.2 Creation of holdings

Between 20 February and 25 February 2023, CBF will collect the existing holdings of predefined securities from customer accounts and redistribute them via CBF account 4424 to the respective CBF main account (xxxx 000). Positions currently held in the testing accounts will remain and only when no position is in place a holding will be created. Holdings will be created, if the customer registers for "Regression test".

Once the holdings are set up, customers acting in ICP mode can verify them via the CASCADE Online functionality (HOST / PC) or MT535 Statement of Holdings, if subscribed to in IMS23. In the above-mentioned time frame, customers must not enter test cases nor transmit instructions via an automated connectivity channel towards IMS23 or UTEST. In addition, the CASCADE Online functionality (HOST / PC) must not be used. This will allow the CBF Customer Readiness team a reconfiguration of IMS23 in time.

The static data for the ISINs selected are based on the settings defined in Wertpapier-Service-System (WSS) stored in IMS23.

For each account participating in regression testing, holdings are enabled as shown in the table below:

ISIN	Name	Nominal available
DE0008303504	TAG Immobilien AG	10,000
DE000A0E5U85	0,378 % DEPFA FDG III 05/UND. FLR 08.06.G	100,000
DE000A0F5UF5	ISHARES NASDAQ-100 U.ETF	10,000
DE000A1E8ZB7	2,836% NECKARPRI GMBH 11/47	100,000
DE000A1YCQD2	0,375% STADT HAMBURG LSA A.2/15	100,000
DE000ETFL250	DK STOXX EUROPE 50	10,000

Table 2: List of ISINs for the CBF Fileservice Migration Customer Simulation

¹ If there are updates, customers are requested to use the latest version of the Announcements for their preparation of test cases.

4.3 Limitation for pending instructions

During the test execution phase, each customer participating in the simulation is requested to consider that high volumes of pending instructions in UTEST impacts the performance of all T2S test environments. Therefore, every customer has to actively monitor the number of pending instructions and ensure that no more than 500 pending instructions are active in the test system. To determine the number, all instructions must be considered, independent from:

- The status, that is, matched, unmatched, hold or release;
- The business procedure, that is, domestic and cross-border instructions, stock exchange trades and instructions resulting from corporate actions;
- The connectivity channel, that is, ICP or DCP mode;
- The test activity conducted with Clearstream Banking (for example OneClearstream).

This limitation applies to all accounts (and sub-accounts) of a customer that are set up in the CBF Customer Simulation environment (IMS23) for testing.

4.4 Issue Declaration Form

The Issue Declaration Form is a fillable form for the written submission of any issue encountered during the Customer Simulation phase for the CBF Fileservice migration to ClearstreamXact. The form is requested to be sent if a test issue raised by a customer cannot be resolved immediately by the respective support team. The completed declaration form will initiate an investigation of the issue. This procedure aims to avoid misunderstandings and to accelerate the solution process.

Completed Issue Declaration Forms can be sent to connect@clearstream.com.

5. Execution of test cases

This chapter provides the detailed test data and steps for a successful test execution. Based on this framework, customers can define further requirements and can create settlement instructions on their demand, if applicable.

5.1 Testing based on data snapshot

As from **20 February 2023, 07:00, until 21 February 2023, 06:00**, to ensure a broad test scope, files created in production on these days will be snapshotted and made available in the Clearstream Banking Luxembourg (CBL) test environment (OCCT) for Xact Web Portal. These files will **not** be available in HOST Fileservice.

In the period from **27 February to 24 March 2023** customers can retrieve the snapshotted files for their analysis and testing. Thus, customers can compare the reporting they currently receive with the one they will be able to access in Xact from 2 May 2023.

Deviating from the start in production, compressed files in ZIP format are also provided, as they are part of the current setup.

When comparing the file names in production and OCCT, it should be noted that the file names in the OCCT are identical to those of the future production. This approach was chosen to ensure sufficient transparency of the migration process.

Files, which will not be available anymore after migration, are to be retrieved in Xact OCCT under the category "Other". If customers want to retrieve and download them, they need to be released by the Customer Readiness team. Related requests can be sent to T2S-Support@clearstream.com and need to state the following details:

- CBF account number: XXXX 000;
- Report name as displayed in the past in CBF Fileservice;
- File name as displayed in the past in CBF Fileservice;
- Date / period "DD.MM.YYYY to DD.MM.YYYY.

5.2 Testing based on regression tests in IMS23

During the simulation period (27 February to 24 March 2023), customers can perform test cases on their demand and like this generate new files, if the related report subscription was enabled for previous testing. All test files offered in the scope of services of IMS23 will be transferred to OCCT and show the new names of future production. New test files generated out of regression testing will appear in HOST Fileservice.

5.3 Availability of HOST Fileservice and Xact Web Portal in test environments

In general, the HOST Fileservice and the OCCT environments will be open for customers as outlined on the IMS23 Availability web page. The opening of the environments depends on the downtimes announced by T2S. Moreover, it needs to be considered that on every Friday afternoon (starting at 14:00) installation activities in IMS23 and OCCT are scheduled. Customers are requested to check the latest schedule on the IMS23 Availability web page for their testing activities.

6. Contact

During the preparation and the execution of the Customer Simulation period from 27 February to 24 March 2023, please use the following contacts should you have questions regarding the settings of the CBF Customer Simulation environment.

- If you use the IMS23 environment: Connectivity Support team via email to connect@clearstream.com
- If you use the **OCCT** for Xact Web Portal environment: Connectivity Simulation team via email to connect-test@clearstream.com

Particular questions related to the setup and test data as well as the test results will be routed to the responsible CBF test teams. During the Customer Simulation period, these teams are available from 09:00 to 16:00.

Contact www.clearstream.com Published by Clearstream Banking Frankfurt

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