



A#:	9226
P&S:	8799
Date:	November 11, 2022
To:	ALL MEMBERS AND LIMITED MEMBERS
From:	WEALTH MANAGEMENT SERVICES – MUTUAL FUNDS
Attention:	MANAGER MUTUAL FUNDS OPERATIONS, MANAGER DATA PROCESSING, MANAGER CASHIERS, MANAGER P&S DEPARTMENT
Subject:	MF Info Xchange Service Enhancements

Effective **December 2, 2022**, National Securities Clearing Corporation (NSCC) will implement additional enhancements and capabilities to MF Info Xchange – the first communications center of its kind from DTCC’s Wealth Management Services. MF Info Xchange facilitates and streamlines the delivery and receipt of time-critical notices and helps to effectively organize, prioritize and manage events and notifications through a centralized communications service and event calendar - never miss an event again!

As part of this release, NSCC will enhance MF Info Xchange as follows:

1) “Issue” Notification

Current Functionality

Under the current functionality, when the “What is the level of Impact for this issue” field is set to “Fund complex wide”, the email generated to the receivers of the notification will indicate “Not Provided” in the “Impacted Fund Name(s)” section.

From: MF Info Xchange Notification PSE <MFIx_Notifications_PSE@dtcc.com>
Sent: Monday, September 26, 2022 11:38 AM
Subject: ABC FUNDS (NSCC Participant Number 00005119) - Issue Notification: Pricing Delay (Event ID 1001174) - Initial Notification (For NSCC use only: 1108)

PLEASE DO NOT REPLY TO THIS EMAIL AS THIS IS NOT A MONITORED MAILBOX. Questions regarding this notification should be directed to ABC FUNDS

Fund Company Name: ABC FUNDS
NSCC Participant Number: 00005119
Event Type: Issue Notification: Pricing Delay
Event ID (system generated ID number): 1001174
Event Status: Initial Notification
Effective Date: 09/20/2022
Effective Time: Close of Market
Impacted Fund Name(s): Not Provided

This notification is sent to you by ABC FUNDS, through NSCC MF Info Xchange. Please see attached document for more details.

DTCC offers enhanced access to all important notices via a Web-based subscription service. The notification system leverages RSS Newsfeeds, providing significant benefits including Real-time updates and customizable delivery. To learn more and to set up your own DTCC RSS Alerts, visit http://www.dtcc.com/subscription_form.php.

Enhanced Functionality

In order to further streamline notification emails, “Impacted Fund Name(s)” section of the email will indicate “Fund Complex Wide” when the “What is the level of Impact for this issue” field is set to “Fund complex wide”.

From: MF Info Xchange Notification QA <MFI_X_Notifications_QA@dtcc.com>

Sent: Friday, September 23, 2022 4:34 PM

Subject: ABC FUNDS (NSCC Participant Number 00001234) - Issue Notification: Pricing Delay (Event ID 72147) - Initial Notification (For NSCC use only: 62708)

PLEASE DO NOT REPLY TO THIS EMAIL AS THIS IS NOT A MONITORED MAILBOX. Questions regarding this notification should be directed to ABC FUNDS

Fund Company Name: ABC FUNDS

NSCC Participant Number: 00001234

Event Type: Issue Notification: Pricing Delay

Event ID (system generated ID number): 72147

Event Status: Initial Notification

Effective Date: 09/23/2022

Effective Time: Close of Market

Impacted Fund Name(s): Fund Complex Wide

This notification is sent to you by ABC FUNDS, through NSCC MF Info Xchange. Please see attached document for more details.

2) “Fee/Breakpoint Change” Notification

Current Functionality

Under the current functionality, clients can select key data elements (Security Issue ID, Fund Name, Fund Number, Ticker and Share Class) and other notification specific fields (both current and future dated changes) from MFPS II Profile Security (Profile Security) when creating a notification.

Enhanced Functionality

In order to further minimize keystrokes and reduce risks associated with manual entry, the existing seamless integration with Profile Security will be extended to extract and auto-populate additional data elements (including future dated changes) from Profile Security.

Additional Profile Security integration will be implemented for the following 12b-1 fee data elements and will include both current and future dated values (if available in Profile Security):

- “Fee/Breakpoint Change” Notification (12b-1 fee section)
 - Fee Currently Paid (%)
 - New Fee Payment (%)

Future dated changes (“New Fee Payment (%)”) will be extracted into the notification if the future date of the change in Profile Security matches the Effective Date of the notification.

In order to leverage this feature, fund clients must have populated the applicable information in the Profile Security database. This emphasizes the importance of funds participating and ensuring all their securities are available in the Profile Security database. For more information on Profile Security please refer to <http://www.dtcc.com/wealth-management-services/mutual-fund-services/mutual-fund-profile-service-ii>

3) “Fund Merger” Notification

Current Functionality

Under the current design, when a fund client is communicating that NAV will be used to process the merger, only one of the following fields can be set to “Yes”: “Retiring Fund NAV will be used to process the merger” **or** “Survivor Fund NAV will be used to process the merger”.

Enhanced Functionality

In order to specify that both retiring and survivor fund NAVs will be used to process the merger, the existing validation rule will be relaxed to allow both “Retiring Fund NAV will be used to process the merger” **and** “Survivor Fund NAV will be used to process the merger” fields to be set to “Yes”.

4) Contact Information

Current Functionality

Under the current design, notification submitter’s contact information can be provided by the submitter within Step 1 of the notification.

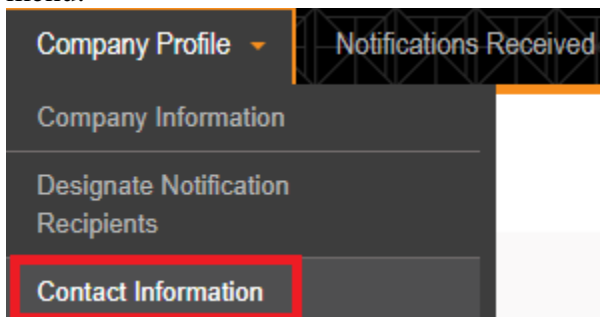
Create Notification

The screenshot shows a 'Create Notification' form with a progress indicator at the top showing Step 1 as the active step. Below the progress indicator are four dropdown menus: 'Event Type', 'Event Status', 'Effective Date', and 'Effective Time'. Below these are three input fields: 'Contact Name: Full Name', 'Contact Number: Phone Number', and 'Contact Email: Email'. These three input fields are enclosed in a red rectangular box.

Enhanced Functionality

In order to further streamline the communication process and minimize key strokes, MF Info Xchange portal will be enhanced as follows:

1. A new “Contact Information” option will be added under the “Company Profile” navigation menu.



When selected, this option will take the user to the “Company Contact Information” screen. Users with the Update role can add and save up to 10 contacts. Users with the View role can view all saved contacts.

The Audit trail button will take the user to the Company Contact Information audit trail screen.

Company Contact Information

Add up to 10 contacts

Group Name	Contact Number	Contact Email
group@fund.com		
Jim Smith	212-222-2222	jsmith@fund.com
Mary Jones	212-111-1111	mjones@fund.com

2. When creating/updating notifications, users with the Update role can view all contacts saved within the “Company Contact Information” screen and select one of these contacts in Step 1. All saved information for this contact will be auto-populated into the “Contact Name”, “Contact Number” and “Contact Email” fields.

Create Notification

Event Type: Fund Merger

Step 1 Step 2 Step 3 Step 4

Event Type* Fund Merger

Event Status* Initial Notification

Effective Date* 12/01/2022

Effective Time* Open of Market

Contact Name*
Full Name
Jim Smith
Group Name
Jim Jones
Yana

Contact Number*
Phone Number

Contact Email*
Email

Alternatively, clients can continue to manually enter contact information in Step 1 if the respective contact information is not saved under the “Company Contact Information”.

5) API “Query Notifications – Receiver View” endpoints

Current Functionality

Under the current design, notification receivers can provide optional search parameters when making an API call to receive a list of notifications distributed to them. These parameters (if provided on the API endpoint) will filter returned results to list only notifications that satisfy the provided search criteria.

“Notification Received Start Date” (“notificationReceivedDateStart” input parameter) and “Notification Received End Date” (“notificationReceivedDateEnd” input parameter) can be

provided to narrow down the list of notifications received during the specified period (for example between 12/1/2022 and 12/2/2022 or just for one day - 12/1/2022).

However, when making an API call multiple times a day to receive the list of notifications that were received since the previous API call, the returned results might include notifications received in a previous call.

For example: Fund ABC distributes the following notifications to Firm XYZ:

Event ID	Distribution Date/Time
12344	11/30/2022 9pm
12355	12/01/2022 9am 12/01/2022 11am (notification update)
12366	12/01/2022 2pm
12377	12/01/2022 10pm

Firm XYZ makes 3 API calls a day (on a daily basis): at 12pm, 4pm and 11:59pm to get a list of notifications received during that day. On 12/01/22 Firm XYZ makes 3 API calls to get a list of notifications received on 12/01/2022 (“notificationReceivedDateStart”=12/01/2022 and “notificationReceivedDateEnd”=12/01/2022):

- 12pm API call will return the following Event IDs:
 - Event ID 12355 (received on 12/01/2022 at 11am) **Note:** the 9am version will not be returned; the more recent version received at 11am will be returned by this call.
- 4pm API call will return the following Event IDs:
 - Event ID 12355 (received on 12/01/2022 at 11am) **Note:** the 9am version will not be returned; the more recent version received at 11am will be returned by this call.
 - Event ID 12366 (received on 12/01/2022 at 2pm)
- 11:59pm API call will return the following Event IDs:
 - Event ID 12355 (received on 12/01/2022 at 11am) **Note:** the 9am version will not be returned; the more recent version received at 11am will be returned by this call.
 - Event ID 12366 (received on 12/01/2022 at 2pm)
 - Event ID 12377 (received on 12/01/2022 at 10pm)

Note: Event IDs 12355 and 12366 will be returned multiple times since the call is made for the same Notification Received Date (12/01/2022).

Enhanced Functionality

In order to further enhance API notification receiver search functionality and filter out notifications that were received in a prior API call, Distribution ID (“distributionId”) will be added as an additional optional search parameter on the “Query Notifications – Receiver View” API endpoints. Distribution ID is a unique number automatically generated and assigned by MF Info Xchange to each successful distribution of a notification.

The “distributionId” is being returned within the payload of the successful 200 response when notification receivers make a search notification call:

Code	Description
200	<div style="background-color: #333; color: white; padding: 5px; text-align: center;">Successful Request</div> <p>Media type</p> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">*/*</div> <p>Controls Accept header.</p> <p>Example Value Schema</p> <pre style="background-color: #333; color: white; padding: 10px;"> { "status": 0, "attributes": [{ "eventId": "string", "effectiveDate": "string", "companyName": "string", "eventType": "string", "distributionId": "string", "recipientName": "string", "notificationStatus": "string", "receivedDate": "string", "clientNb": "string", "recipientClientNb": "string" }], }</pre>

Notification receivers can utilize the “distributionId” input parameter to request and retrieve data since their last API call. If a “distributionId” is provided as input on the “receive notification” endpoint, the system will return only those Event IDs where the Distribution ID is greater than the one provided as a search parameter. If the Event ID was updated multiple times since the previous call, only the latest/most current version of the notification will be returned by the system.

For example: Fund ABC distributes the following notifications to Firm XYZ:

Event ID	Distribution Date/Time	Distribution ID
12344	11/30/2022 9pm	1110
12355	12/01/2022 9am	1120
	12/01/2022 11am (notification update)	1130
12366	12/01/2022 2pm	1140
12377	12/01/2022 10pm	1150

Firm XYZ makes 3 API calls per day: at 12pm, 4pm and 11:59pm to get a list of notifications received during that day. The last/highest Distribution ID received in a prior API call is provided on each API call.

API call made by Firm XYZ on date/time	Distribution ID provided by Firm XYZ on the API call	Event ID and Distribution ID returned by the API call
11/30/2022 11:59pm	1105 (last distribution id received via the previous API call)	Event ID 12344 Distribution ID 1110
12/01/2022 12pm	1110 (last distribution id received via the previous API call)	Event ID 12355 Distribution ID 1130 Note: Distribution ID 1120 will not be returned since the notification was updated and the system returns the later version/Distribution ID 1130
12/01/2022 4pm	1130 (last distribution id received via the previous API call)	Event ID 12366 Distribution ID 1140
12/01/2022 11:59pm	1140 (last distribution id received via the previous API call)	Event ID 12377 Distribution ID 1150

Note: The “distributionId” optional input/search parameter will be available on the following API endpoints and can be used as a single input parameter or in combination with the other existing input parameters:

- GET /ocode/{ocode}/received/notifications
- GET /client/{clientId}/received/notifications/search
- GET /client/{clientId}/received/notifications/securities

6) Enhanced “Update Notification” API functionality

In order to further streamline notification revisions via API calls, the following enhancements will be made to “Create”, “Update” and “Receive” notification API endpoints.

Event types where clients can add/update/delete one or multiple rows within a table, for example the “Impacted Funds” table (“repeatable section”), will be enhanced with additional data elements.

Note: Enhancements described in this section will apply only to notification revisions made via API calls. There is no impact to the existing Web User Interface functionality.

Create a Notification

When a client creates a new notification using endpoint: **POST /client/{clientId}/notifications/**

- Upon successful creation, the “201” success response to the client will include the Event ID, Distribution Status (current functionality) and the newly saved notification object (new functionality).
- The notification object in the “201” success response will contain a new “rowId” data element with the value (assigned by MF Info Xchange) for each record in the repeatable section (e.g., “Impacted funds” sections).
- The first record in each repeatable section will have a “rowId” of one (“1”).

Update a Notification

When updating an existing notification using endpoint:

PUT /client/{clientId}/notifications/{eventId}/update

the following fields: "status" (existing field) and "rowId" (new field) must be provided for each row in the repeatable sections.

- For updating or deleting existing data inside of repeatable sections, clients will need to include the "rowId" for each record being updated, retained or deleted. Row Ids must be obtained/saved from the "201" response received during Create Notification (if the data returned by the "Create Notification" endpoint was saved in the client's system) or from calling the "Receive Notification" endpoint: GET /client/{clientId}/submitted/notifications/{eventId}. In addition to the "rowId", clients must provide a "status" field with one of the following values:
 - To update data within the row, clients must provide a "status" of "U".
 - To delete a row, clients must provide a "status" of "D"
 - If an existing row is not being updated or deleted, it must be provided with a "status" of "U".

Note: each existing rowId must be provided with a "status" of "U" or a "D".

- For adding new records/rows to repeatable sections, clients will need to provide a "status" of "I" to each record being added ("rowId" must be blank)
 - The "200" response on a successful update/PUT call will include the newly updated notification object containing the new Row Ids for all new records added (as well as the exiting Row Ids).
- "status" field definitions:
 - "I" - insert new record
 - "D" - delete existing record
 - "U" - update/keep existing record

Receive ("Query Notifications – Submitter View" API endpoint) – notification submitter endpoints

GET /client/{clientId}/submitted/notifications/{eventId}

On the "200" success response, "status" and "rowId" data elements will be included in the notification's repeatable sections.

- The "status" field will continue to have blank values.
- The "rowId" field will contain row id values.

Notification Receiver functionality ("Query Notifications – Receiver View" API endpoint)

GET /client/{clientId}/received/notifications/{eventId}

Repeatable sections on the "200" success response will contain "status" and "rowId" data elements.

- The "status" field will continue to have blank values. This field does not apply to notification receivers.
- The "rowId" field will contain row id values. Notification receivers can discard/ignore these values or save these Row Ids with the notification data. In the event another version of the notification is received, clients can utilize Row Ids to identify if the new version of the repeatable section had any changes (by comparing data received to the previous version of the data with the same Row Id).

PLEASE NOTE: In order to perform code migration, MF Info Xchange will not be available in production on December 1, 2022 between 8pm-10pm ET.

TESTING

Effective November 11, 2022, clients can begin testing in the Participant Services Environment (PSE). Clients are encouraged to test and must contact their Relationship Manager before testing begins if access to PSE has not been previously established.

DOCUMENTATION

Updated documentation will be available on the DTCC Learning website on or about December 30, 2022.

Updated API endpoints will be available in the DTCC API Marketplace on November 11, 2022 (Test environment) and December 2, 2022 (Production environment).

Clients can find more information on MF Info Xchange at <http://www.dtcc.com/wealth-management-services/mutual-fund-services/mf-info-xchange>

Questions and comments regarding this Important Notice may be directed to your Relationship Manager, Account Manager or Wealth Management Services at **212-855-8877**.

Yana Granovskiy
Product Manager

DTCC Wealth Management Services