The Derivatives Service Bureau (DSB) Ltd

File Download

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Version: 3.6

Table of Contents

Change History

Date	Change	Version	Author	Revision Details
19 October 2017	Creation	1.0	DSB	
22 November 2017	Update	1.1	DSB	Added information related to proxy and firewall settings.
25 July 2019	Update	1.2	DSB	Updated File Download path format.
19 November 2019	Update	1.3	DSB	Added information for instances in which a file will not be available and maintenance hours details in line with the 2020 amended operating hours in section 2Appended --auth-no-challenge in all the wget commands for the test cases in section 3.2. Removed test case 4 pertaining to the wget command to download all the Rates records for all the days of the year as it is quite rigorous to the system. Introduced 4 different wget commands for test case 3 pertaining to downloading Rates records for a specific month to cover all possible number of days.
1 August 2020	Update	1.4	DSB	Added information in section 3 to let the users know that the response record structure can also be found in the REST API document section 3.7.
27 December 2022	Update	1.5	DSB	Corrected wget samples of February 2019 and added sample for February 2020.
13 January 2023	Update	2.0	DSB	Updated Section 4.1 to include the DSB OTC ISIN Weekly Snapshot.
27 March 2023	Update	3.0	DSB	Major revision to include UPI.
18 April 2023	Update	3.1	DSB	Clarification in Automating the file-download.
20 June 2023	Update	3.2	DSB	Include the new FDL file structure and ISIN migration FDL.
24 October 2023	Update	3.3	DSB	1.1.1.1 Delta Files changes: - Correction: "ISIN" Delta files include deprecated ISINs and not migrated ISINs in "ISIN" Delta files. Added "ISIN+" Delta files.
2 June 2024	Update	3.4	DSB	1.1.1.3 Trigger Files Added information about Trigger Files
13 September 2024	Update	3.5	DSB	Added Section 4 Accessing File-Download via GUI and updated the DSB Logo.

| 22 April 2025 | Update | 3.6 | DSB | Provided information as to why the File Download file is in JSON format. |
| | | | | Updated information about ToTV becoming an Ancillary Service. |

1   File Download Files

File download files are specific to each of the DSB's environments and can be found in the following locations:

> https://**<env>**.anna-dsb.com/file-download/

where **<env>** can be one of:

- PROD – for the production environment
- UAT – for the next release UAT environment
- UAT2 – for the as-production UAT2 environment
- UPIUAT – for the UPI UAT environment

Under the main directory structure, users can access Records, Reports and Schemas.

Index of /file-download/

```
../
Records/                           13-Apr-2023 14:52        -
Reports/                           13-Apr-2023 14:52        -
Schemas/                           17-Apr-2023 20:46        -
isin/                              13-Apr-2023 14:52        -
json-schema/                       17-Apr-2023 20:46        -
report/                            13-Apr-2023 14:52        -
totv/                              13-Apr-2023 14:52        -
totv-v2/                           13-Apr-2023 14:52        -
```

1.1   Records

The Records folder represents the data files produced by the different services. At the time of writing the services offered cover OTC-Products (ISIN, ISIN-migration, ISIN+, UPI, UPI.CUSIP, UPI.FIGI, and UPI.SEDOL records) as well as TOTV records.

The DSB produces a data file with a ".records" extension and a compressed version of this file with a ".zip" extension.

Index of /file-download/Records/

```
../
OTC-Products/                      13-Apr-2023 14:52        -
TOTV/                              13-Apr-2023 14:52        -
```

1.1.1   OTC-Products

For OTC-Products, the DSB maintains both daily Delta files for the ISIN, ISIN-migration, ISIN+, UPI, UPI.CUSIP, UPI.FIGI, and UPI.SEDOL service and Snapshot files for the ISIN service.

Within the Delta folders, there are ISIN, ISIN-migration, ISIN+, UPI, UPI.CUSIP, UPI.FIGI, and UPI.SEDOL subfolders.

Index of /file-download/Records/OTC-Products/Delta/

```
../
ISIN/                              08-Oct-2023 13:58        -
ISIN+/                             18-Oct-2023 15:03        -
ISIN-migration/                    16-Oct-2023 00:11        -
UPI/                               16-Oct-2023 00:05        -
UPI.CUSIP/                         16-Oct-2023 00:05        -
UPI.FIGI/                          16-Oct-2023 00:05        -
UPI.SEDOL/                         16-Oct-2023 00:05        -
```

Inside each folder, there are year folders, "YYYY", e.g.:

Index of /file-download/Records/OTC-Products/Delta/UPI/

```
../
2023/                              19-Jun-2023 00:05        -
```

Within each year folder, there are day folders, YYYYMMDD, representing the day the records relate to, e.g.,:

Index of /file-download/Records/OTC-Products/Delta/UPI/2023/

```
../
20230417/                          18-Apr-2023 00:05        -
20230418/                          19-Apr-2023 00:05        -
20230419/                          20-Apr-2023 00:05        -
20230420/                          21-Apr-2023 00:05        -
20230421/                          22-Apr-2023 00:05        -
20230424/                          25-Apr-2023 00:05        -
20230425/                          26-Apr-2023 00:05        -
20230426/                          27-Apr-2023 00:05        -
20230427/                          28-Apr-2023 00:05        -
20230428/                          29-Apr-2023 00:05        -
20230501/                          02-May-2023 00:05        -
20230502/                          03-May-2023 00:05        -
20230503/                          04-May-2023 00:05        -
20230504/                          05-May-2023 00:05        -
20230505/                          06-May-2023 00:05        -
20230508/                          09-May-2023 00:05        -
20230509/                          10-May-2023 00:05        -
20230510/                          11-May-2023 00:05        -
20230511/                          12-May-2023 00:05        -
20230515/                          16-May-2023 00:05        -
20230516/                          17-May-2023 00:05        -
20230517/                          18-May-2023 00:05        -
20230518/                          19-May-2023 00:05        -
20230519/                          20-May-2023 00:05        -
20230522/                          23-May-2023 00:05        -
```

Each day is then broken down by asset class as follows:

- Commodities
- Credit
- Equity

- Foreign_Exchange
- Other
- Rates

Each asset class folder will contain a ".records" and a ".zip" file. The ".records" file contains one or more json records separated by newline ('\n'). The .zip file is a compressed version of the ".records" file.

The file is provided in JSON format as this is widely used for financial instruments and is a suitable choice for data representation and exchange in financial systems. JSON files can be opened using various text editors. Microsoft Excel is not typically used with JSON files. The DSB recommends, that if users require the file in an alternative format, such as Excel, to search online for resources to convert as required.

1.1.1.1 Delta Files

Various Delta files are published daily, including:

- ISIN
- ISIN-migration
- ISIN+
- UPI
- UPI with Alternative Underlying Identifier (UPI.CUSIP, UPI.FIGI, UPI.SEDOL)

These files contain the history of all records (i.e., if an ISIN is created and expired on the same day the ISIN Delta file will contain both the new ISIN record and the expired ISIN record).

Delta files are created if a single record was created or received an update (i.e., expired, deprecated, or migrated) that day.

1.1.1.1.1 ISIN

ISIN Delta files contain ISIN records created, updated, expired, or deprecated during the day.

ISIN Delta files are published at approximately 00:05am UTC every day.

1.1.1.1.2 ISIN-migration

ISIN-migration Delta files contain ISIN records migrated by the pre-population process during the day.

ISIN-migration Delta files are published at approximately 00:05am UTC every day.

1.1.1.1.3 ISIN+

ISIN+ Delta files contain both ISIN and ISIN-migration records during the day.

ISIN+ Delta files are published around 00:50 AM UTC daily.

1.1.1.1.4 UPI

UPI Delta files contain UPI records created or updated during the day.

UPI Delta files are published at approximately 00:05am UTC every day.

The most recent UPI Delta File will be immediately available to fee-paying users (i.e., DSB UPI users that pay for DSB access), DSB UPI registered users will be able to access the file one day after it has been published.

1.1.1.1.5 UPI with Alternative Underlying Identifier (UPI.CUSIP, UPI.SEDOL, UPI.FIGI)

These Delta files contain UPI records with Alternative Underlying Identifiers:

- UPI.CUSIP includes UPI records with CUSIP alternative Underlying identifier
- UPI.FIGI includes UPI records with FIGI alternative Underlying identifier
- UPI.SEDOL includes UPI records with SEDOL alternative Underlying identifier

UPI Delta Files with alternate underliers (e.g., CUSIP, FIGI) are generated and available for fee-paying DSB Users with the appropriate licenses who have been set up in the Client Onboarding and Support Platform (COSP) to access these files.

1.1.1.2 Snapshot Files

Snapshot Files are generated at 16:00 UTC every Sunday and contain all records in the databases in the status that they were at as at the end of the day before (Saturday).

Snapshot Files are currently available for ISIN and will be available for [1]UPI from 19 November 2023.

More information about the Snapshot Files is available at https://www.anna-dsb.com/download/dsb-isin-weekly-snapshot/ on the DSB Website.

1.1.1.3 Trigger files

Trigger Files are written at the end of the process, allowing users to monitor for the presence of the trigger file, which signifies that all processing has been completed.

A Trigger File is a zero-byte file which will be published in the day folders, in the format *YYYYmmdd.trigger* when processing is completed.

Trigger files apply to both the Delta and Weekly snapshots folders.

Index of /file-download/Records/OTC-Products/Delta/ISIN/2024/20240516/

../		
Commodities/	17-May-2024 05:05	-
Credit/	17-May-2024 05:05	-
Equity/	17-May-2024 05:05	-
Other/	17-May-2024 05:05	-
Rates/	17-May-2024 05:05	-
20240516.trigger	17-May-2024 05:10	0

Index of /file-download/Records/OTC-Products/Delta/UPI/2024/20240527/

../		
Foreign Exchange/	28-May-2024 05:28	-
20240527.trigger	28-May-2024 05:28	0

Index of /file-download/Records/OTC-Products/Delta/UPI.CUSIP/2024/20240527/

../		
20240527.trigger	28-May-2024 05:28	0

Index of /file-download/Records/OTC-Products/Delta/UPI.FIGI/2024/20240527/

../		
20240527.trigger	28-May-2024 05:28	0

Index of /file-download/Records/OTC-Products/Delta/UPI.SEDOL/2024/20240527/

../		
20240527.trigger	28-May-2024 05:28	0

Index of /file-download/Records/OTC-Products/Delta/ISIN+/2024/20240527/

../		
20240527.trigger	28-May-2024 08:35	0

Index of /file-download/Records/OTC-Products/Snapshots/ISIN/2024/20240711/

../		
Commodities/	12-Jul-2024 10:13	-
Credit/	12-Jul-2024 10:14	-
Equity/	12-Jul-2024 10:13	-
Foreign Exchange/	12-Jul-2024 10:14	-
Other/	12-Jul-2024 10:14	-
Rates/	12-Jul-2024 10:14	-
20240711.trigger	12-Jul-2024 10:14	0

1.1.2   TOTV

The Traded On a Trading Venue (ToTV) Service is now an Ancillary Service more information can be found here[2].

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[2] https://www.anna-dsb.com/dsb-totv-utotv-service/

The DSB maintains two versions of files in relation to the Trading On a Trading Venue (ToTV) service:

- **V1** – TOTV Files with records based on ESMA Financial Instruments Reference Data System (FIRDS).
- **V2** - TOTV Files with records containing information from both FCA FIRDS and ESMA FIRDS.

A similar year and day folder structure, as for the OTC-Products, is followed for the TOTV Files. Under the day folder, ToTV zip files identified by an asset class and instrument type code are available.

Please refer to the ToTV page[3] on the DSB's website for more information on ToTV workflows.

1.2   Reports

1.2.1   OTC-Products

The DSB currently produces several monthly reports for ISIN and UPI products:

- Number of ISINs and UPIs Created By Product
- ISIN or UPI Creation Trend
- Number of Searches by search/retrieval type

Index of /file-download/Reports/

../
ISIN/   13-Apr-2023 14:52   -
UPI/   13-Apr-2023 14:52   -

1.3   Schemas

1.3.1   OTC-Products

Index of /file-download/Schemas/OTC-Products/

../
ISIN/   13-Apr-2023 14:53   -
UPI/   13-Apr-2023 14:53   -
codesets/   14-Apr-2023 11:46   -
products/   13-Apr-2023 14:53   -

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[3] https://www.anna-dsb.com/totv-utotv/

DSB users may obtain the ISIN, UPI and Codesets schema files from this folder. Please note that schema files are also available in [Github](#)[4].

Schemas are updated occasionally. The DSB will send out a notification to users when schema changes are made.

Schemas are available for the following asset classes:

- Commodities
- Credit
- Equity
- Foreign_Exchange
- Other
- Rates

The products folder is a soft link to the ISIN folder.

1.3.2   ISIN Product Definitions

DSB users may obtain ISIN product definitions in this folder. Please note that this is only available until June 2023.

1.3.3   ToTV Product Definitions

DSB user may also obtain ToTV product definitions in this folder.

Please note the Traded On a Trading Venue (ToTV) Service is now an Ancillary Service more information can be found [here](#)[5].

1.3.4   Normalized ISIN Product Definitions

This folder is a soft link to the OTC-Products folder.

Index of /file-download/Schemas/normalized-isin-product-definitions/

```
../
ISIN/                          13-Apr-2023 14:53        -
UPI/                           13-Apr-2023 14:53        -
codesets/                      14-Apr-2023 11:46        -
products/                      13-Apr-2023 14:53        -
```

1.4   JSON Schema

This folder is a soft link to the Schemas folder.

1.5   ISIN

This folder is a soft link to the Records/OTC-Products/Delta/ISIN folder.

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[4] https://github.com/ANNA-DSB/Product-Definitions

[5] https://www.anna-dsb.com/dsb-totv-utotv-service/

1.6   ToTv

This folder is a soft link to the Records/TOTV/V1 folder.

Please note the Traded On a Trading Venue (ToTV) Service is now an Ancillary Service more information can be found here .

1.7   ToTv-v2

This folder is a soft link to the Records/TOTV/V2 folder.

Please note the Traded On a Trading Venue (ToTV) Service is now an Ancillary Service more information can be found here[6].

1.8   Report

This folder is a soft link to the Reports folder.

1.9   Examples

Example 1 – to download all the ISIN records in the Rates asset class that were created or modified in the Production environment on 27 March 2023:

https://prod.anna-dsb.com/file-download/Records/OTC-Products/Delta/ISIN/2023/20230327/Rates/Rates-20230327.records

Example 2 – to download all the UPI records with the CUSIP as the alternate underlier identifier in the Rates asset class that were created or modified in the UPI UAT environment on 17 April 2023.

https://upiuat.anna-dsb.com/file-download/Records/OTC-Products/Delta/UPI.CUSIP/2023/20230417/Rates/Rates-20230417.records

Example 3: to access all the ISIN records in the Rates asset class in the UAT environment as at 1 April 2023.

https://uat.anna-dsb.com/file-download/Records/OTC-Products/Snapshot/ISIN/2023/20230402/Rates/Rates-20230402.records

Example 4 – to access the Production environment Version 1 schema for the ISIN Rate Forward FRA Index product:

https://prod.anna-dsb.com/file-download/Schemas/OTC-Products/ISIN/Rates/Rates.Forward.FRA_Index.InstRefDataReporting.V1.json

Example 5 – to access the Request schema for the UPI Credit Index Swaption product:

https://upiuat.anna-dsb.com/file-download/Schemas/OTC-Products/UPI/Credit/Request.Credit.Option.Index_Swaption.UPI.json

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[6] https://www.anna-dsb.com/dsb-totv-utotv-service/

2 Support and Availability

Please note that the DSB's operating hours are available here[7]. Users are advised to adjust their operations, specifically on Sundays for their production systems according to the DSB's current maintenance hours.

The file download structure may contain other directories which are symbolic links into the structure defined above. These links have been provided to users for backward compatibility with previous directory structures of the file download.

When advised, OTC ISIN users should adopt the new file download structure as soon as possible as the links will be not remain indefinitely.

3 Automating the file download

3.1 Using Wget

It is possible to access the file download section using ReStful API, cURL command and/or Wget command.

Users should note that they must send basic authentication when accessing the file download.

cURL and Wget are just two of the ways to automate the file-download and are neither developed nor supported by the DSB.

For further instructions please refer to the manual pages of cURL and/or Wget command.

4 Accessing file download via GUI
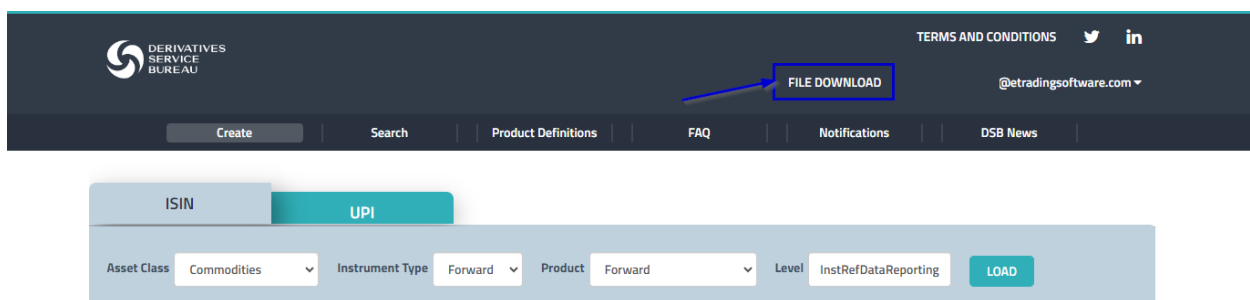
4.1 Access to file download Web GUI

The default Base URL for DSB Web GUI and File Download are:
- Production environment: https://prod.anna-dsb.com
- UAT environment: https://uat.anna-dsb.com
- UAT2 environment: https://uat2.anna-dsb.com

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[4] https://www.anna-dsb.com/operating-hours-and-holidays/

Accessing https://<env>.anna-dsb.com/file-download directly without logging in via the DSB Web GUI first will prompt users with a "Your session has expired" error message.

Once logged into the DSB Web GUI, users can access the file download, by clicking on the FILE DOWNLOAD link:

4.2   Session Expiry

Users accessing the file download via DSB Web GUI will experience a session expiry message and a request to re-login, under the below scenarios:

- Accessing the file download page, via the FILE DOWNLOAD link, after 1 minute.

- Inactivity for more than 30 seconds before clicking on the FILE DOWNLOAD link.

- Inactivity for more than 30 seconds on the file download page.

Users should note that this is expected default behavior for all browsers due to the nature of a browser component and is intended by design. Please note that the browser components are not developed by the DSB, and users may opt to use other tools like wget, curl, etc. to access the DSB File Download Service.