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Regulatory Documents

DocHub API SOAP 3.1.4 Documentation for Distributors

Important Note:

All DocHub SOAP API versions will be decommissioned end of April 2024 and will be migrated to the REST API

Table of revision

Version	Status	Name	Date	Description
0.1	Draft	Stephan Schaub	10.06.2016	Initial version based on the input from of the document SIX_PRIIP_API_DocHub_PoC_v0_Generic.docx.
0.2	Ready for Review	Stephan Schaub	27.06.2016	Overall, add-ons and enrichments.
0.3	Ready for Review	Stephan Schaub	03.07.2016	<ul style="list-style-type: none"> - Include the review comments. - Makes filenames configurable.
1.0	Approved	Stephan Schaub	19.07.2016	<ul style="list-style-type: none"> - 2.2: Add example of consolidated metadata file. - 2.3.4: Add five metadata examples. - 3.1: Enrichment with the missing information. - 3.2.4: Add SOAP request and response sample. - 3.2.5: Add SOAP request and response sample. - 3.2.6: Add SOAP request and response sample. - 3.2.7: Add SOAP request and response sample. - 3.2.8: Add SOAP request and response sample. - 3.2.9: Add SOAP request and response sample.
1.1	Small extensions	Stephan Schaub	21.07.2016	<ul style="list-style-type: none"> - Change classification to "Public for clients". - String search also for the ID fields (SOPA API). - Change description of Document Supplier.
1.2	Small extensions	Stephan Schaub	28.07.2016	<ul style="list-style-type: none"> - Change in three responses XML's the type xsd:Timestamp to xsd:dateTime. - New Status Code value (210 = No result found). - New value "-1" for the case that the plausibility check can't be executed.
1.3	Small extensions	Stephan Schaub	25.08.2016	<ul style="list-style-type: none"> - Correct naming of the ISO code 3166-1 (add -1). - Change the xsd:dateTime format. - Change the attribute jurisdiction String (2) in the SOAP services to jurisdictions String (2) (List, 1-n).
1.4	Extensions	Stephan Schaub	31.10.2016	<p>New attribute in Consolidated metadata:</p> <ul style="list-style-type: none"> - New attribute Publication Classification Type (No 12). <p>New SOAP version V2_0:</p> <ul style="list-style-type: none"> - Adaption of the chapter 3 especially all service details (3.2.4 – 3.2.9). <p>Enhancements of the existing SOAP methods:</p> <ul style="list-style-type: none"> - Change of response parameter of the method "getDocument". - Extension of response parameters of the method "getArchivedDocument". - Extension of request & response parameters of the method "searchArchivedDocument". <p>Others:</p> <ul style="list-style-type: none"> - Add General Scheme Type 201 (SIX DocGen OTC). - Revise all the Document Types. - Correct all xsd:dateTime examples missing ":" in the time zone. - 4.3: Revise the "Web service: Status Codes". - 4.4: Revise the "Web service: SOAP faults".
1.5	Small extensions	Stephan Schaub	20.01.2017	<ul style="list-style-type: none"> - Clarify the link for the GUI on production to https://www.six-dochub.com. - Change SOAP request parameter "archive" from mandatory yes to no. - Revision chapter "3.2.1. Overview of all methods". - Revision chapter "4.4. Web service: SOAP fault". - Some textual changes.
1.6	Small extensions	Stephan Schaub	19.04.2017	<ul style="list-style-type: none"> - Change description of Document Type 3 from UCITS KIID to UCITS/ AIF (Non-UCITS) KIID.

1.7	Small extensions	Stephan Schaub & André Steingruber	26.10.2017	<ul style="list-style-type: none"> - New Document Type 7 = Multi Option Products (MOP) style: Generic including KID. - New Document Type 8 = Multi Option Products (MOP) style: Generic plus supplements. - New Document Type 9 = Writers PRIIP KID. - Change the productive URL's from the WSDL files by adding "www": https://www.six-dochub.com/api/soap/v2_0/soap.wsdl https://www.six-dochub.com/api/soap/soap.wsdl
1.8	Small extensions	Stephan Schaub	28.11.2017	<ul style="list-style-type: none"> - New InstrumentSchemeTypes 301, 302, 303. - Example of the new InstrumentID with the new InstrumentSchemeTypes. - New Type definition for Contract Side Type. - Remove Document Type 9 = Writers PRIIP KID.
1.9	Extension	André Steingruber	23.01.2018	<ul style="list-style-type: none"> - Multiple jurisdictions delimited by pipe ' '. Adaptions on all file samples. - New examples for ETD's in Figure 2. - Compressed file format for Metadata File.
1.10	Small extensions	André Steingruber	09.03.2018	<ul style="list-style-type: none"> - Change of Escape character. - Enrich examples e.g. in Figure 2. - Change in the description of the file-extension, new ".csv.gz". - Sorted List for Jurisdictions, Instrument Identifiers, Issuer Identifiers.
1.11	Small extensions	André Steingruber	18.05.2018	<ul style="list-style-type: none"> - New Document Type 120 = Legal Publication - New Document Type 210 = Research
1.12	Small Changes	André Steingruber	28.11.2018	<p>Metadata:</p> <ul style="list-style-type: none"> - New attribute Sourcing Strategy Type <p>New chapter: Filter capabilities</p> <p>FTP is not offered for new customers. Existing customers should migrate to SFTP</p>
1.13	Small extensions	André Steingruber	11. July 2019	<ul style="list-style-type: none"> - Additional Document Types 121 – 126 for FIDLEG / FINSA Regulation - Rename Document Type 5 Swiss BIB to FINSA KID
1.14	Small extensions	André Steingruber	9. Dec. 2019	<ul style="list-style-type: none"> - Adaptions in Document-Name and Title - Delivery Technology: FTP removed
2.0	skipped			<ul style="list-style-type: none"> - To be in line with the versions of API
3.0	Extensions	Markus Häni	08.06.2020	<ul style="list-style-type: none"> - Added SOAP V3_0 with examples - Removed initial SOAP and SOAP V2_0 - Renamed SOAP method "loginUser" to "getAuthorizationToken" - Removed SOAP method "logoutUser" - New status code 211 - New fault codes 320, 330, 1005 - Revised status and fault codes - Added fractional seconds to timestamp format - Added chapter describing usage of API Services - Added value unknown U0 to jurisdiction - Added value unknown u0 to languages - Added response parameter "totalHits" - Common tables have been moved to a separate document - Added method "getSIXStatusInformation"
3.0.1	Correction			<ul style="list-style-type: none"> - WSDL URL corrected https://www.six-dochub.com/api/soap/v3_0/dochub.wsdl https://test.six-dochub.com/api/soap/v3_0/dochub.wsdl - Error 330 better definition - Added example for authentication with token
3.0.2	Extensions			<ul style="list-style-type: none"> - Added that DocumentID is unique in Metadata file deliveries - Reference to test file removed - Reference to DocHub_Environments_Testing Manual added - Additional chapter "Implementation Support" with reference to java application and SoapUI screenshots added - Remarks that a technical user is required to use the API

3.1	Extensions and changes	14.4.2021	<ul style="list-style-type: none"> - Search for multiple attributes - Method getSIXStatusInformation has new response parameters : <ul style="list-style-type: none"> fidlegScopeIndicator sixSecurityType fidlegProspectusRelevancy fidlegProspectusApprovalDate - New search response parameter sourcingStrategyType - Minor typographical corrections - Description of error codes for document requests enhanced. - Added information that documents are retrieved from external servers to getDocument request - Maximum of listLimit is reduced to 100
3.1.1	Extension	28.4.2021	<ul style="list-style-type: none"> - Added information about changed behaviour in chapter "Use of the search in the API" - Amended information about Authorization token in chapter "4.1.3. Authorization" - Updated screenshots for SoapUI - Added Java 11 as requirement for JAVA demo client - Added lastUpdateTimestamp and lastGenerationTimestamp to search response - Added lastUpdateTimestamp and lastGenerationTimestamp to Metadata delivery
3.1.2	Extension	4.4.2022	<ul style="list-style-type: none"> - Information added that the metadata file is valid for all APIs (SOAP, REST and widget) - New Chapter: 3.2 Optional settings for the delivery of metadata - Chapter 4.1.3. Authorization: Amended description of Authorization token - Chapter 4.1.4. Use of the search in the API: Small amendments - Renamed MT1 to TEST - Error message 230 description added
3.1.3	Extension	30.09.2022	<ul style="list-style-type: none"> - New Chapter 4.1.2. Chapter Validity Period marked in Blue
3.1.4	Additional Date Fields	15.06.2023	<ul style="list-style-type: none"> - Added new columns -Valid From, Valid To & Record Date (marked in Blue)
3.1.4	Small Attribute Change	15.06.2023	<ul style="list-style-type: none"> - Changed Instrument Identifiers to General Identifiers. - Changed Instrument Scheme Type to General Scheme Type (marked in Blue)

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1. Overview

Distributors of financial products (typically wealth management firms and insurers) need various documents from the relevant issuers/manufacturers (“Document Suppliers”) to distribute their financial products whilst complying with applicable laws and regulations. Document Suppliers can distribute their documents through DocHub or via third parties.

The document download platform “DocHub” provides distributors with a single interface through which various types of regulatory and marketing documents can be accessed, thereby reducing integration costs. All document downloads are logged for subsequent auditability requirements and the downloaded documents can optionally be archived.

1.1. Introduction SIX Regulatory Document Service DocHub

The following picture shows an overview of the dataflow and interfaces in the SIX Regulatory Document Service.

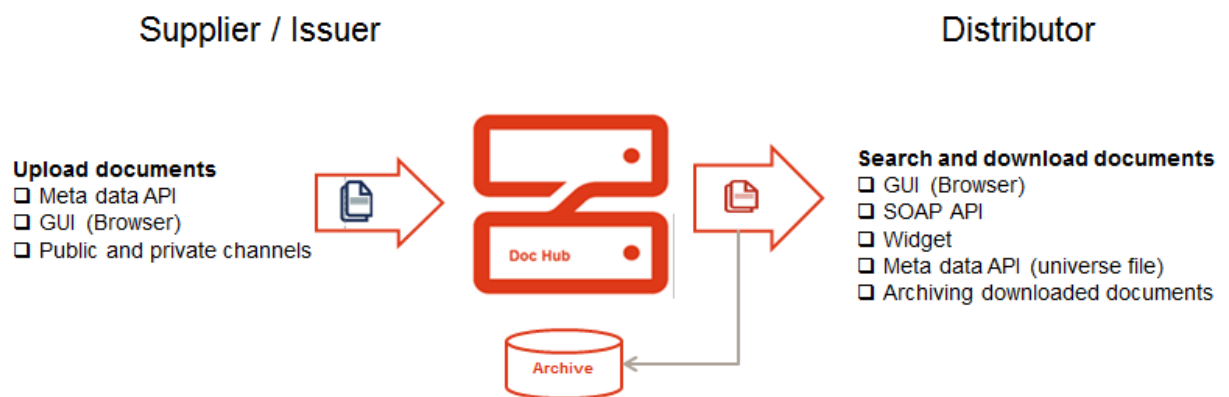


Figure 1: SIX Regulatory Document Service: Flow diagram

This document describes the API between the SIX DocHub and the distributors. This API covers two different types of Interfaces:

- “**Consolidated metadata**” which delivers the metadata (e.g. [General identifiers](#), document type, language) of all available documents.
- “**Document retrieval**” to request and search documents.

1.2. Collateral documents

Additional information or other interfaces are described in following documents, which are available in DocHub Member Area and Documentation Center.

- DocHub Attribute Tables
- DocHub API Documentation - Extension for creation PIB
- DocHub Environments and Testing
- DocHub User Manual
- DocHub Search Widget Documentation
- Service Description DocHub
- RegHub Inbox Notification Quick Guide

2. Usage of DocHub API services

SIX DocHub API service is split in two parts which complement each other. One part is the delivery of Consolidated Metadata Files, the other the SOAP API interface.

For the access to a document the documentID is needed. The documentID can be retrieved from the data delivered in the Consolidated Metadata File or by submitting a search request via SOAP API. It is assumed that the access to a local database on distributors side is faster than the search access via SOAP API to DocHub. To support setup of a local database a consolidated document metadata files are available.

DocHub is an open platform where different suppliers deliver data from issuers. It is possible that multiple entries are delivering for the same document. To enable a smart selection of the best supplier the attribute Sourcing Strategy Type can be used. This identifier indicates the role of the supplier in respect of document distribution.

2.1. Document universe – public and private

DocHub offers public and private documents for distributors. The classification of a document is decided by the supplier. When offered private the supplier decides which distributors have access to the document.

The distributor can decide which suppliers should be included in his universe. Configuration is done by the connection management (see DocHub User Manual). There is no data available for a distributor when no connection is available. In case no data is available, please check your connections first.

This universe definition applies to GUI and API Users.

2.2. Consolidated Metadata Files

These files contain metadata for documents. They are supposed to be used by distributors to get a fast access to the documentID which is needed to retrieve document to check if documents within a big distributor portfolio are available on DocHub. If a distributor needs only dedicated languages, jurisdictions and/or document types, it is possible to restrict the delivery to Document Metadata which is his focus.

There are two different filetypes available. **Full files** with the full universe available for the distributor and **Delta files** containing changes during the last delivery period.

It is recommended to get a full file each day to build up the database on distributors side and use then the delta files to update this universe. The delta files deliver always the changed data against the last delivery of the delta file or full file. In case there is a queue of files to be processed on distributor side and one of the files is a full file, the distributor should skip all delta files up to the full file and start processing this file. It is useless to process the previous deltafiles, since processing of the full file replaces the existing universe. Processing of a full file and the subsequent delta files keeps the universe in sync with the DocHub database.

The frequency of the delta files can be configured according to the needs of a customer.

2.3. SOAP API Interface

With the SOAP API interface all document metadata in the distributors universe can be accessed. Filters defined for metadata files do not apply for the SOAP API. Using the document ID the documents can be accessed and delivered. The distributor can decide, if the downloaded documents should be stored in DocHub archive.

For SOAP API access to archive there are also search and access methods available.

It is assumed that checks of big portfolios are done against the local database build up from metadata files in first place to speed up the access to documents.

Important:

A technical user is required to use SOAP API. GUI users are rejected.

Bulk requests to check an instrument universe should be avoided during main business hours executed with a max. frequency of 2 requests per second. For bulk request we recommend using the Consolidated Metadata File.

2.4. Environments

Beside production (PROD) system a test system (TEST) is available. To avoid mistakes different user-accounts are usually set up for the access to each environment.
 See DocHub Environments and Testing guide.

3. DocHub Consolidated Metadata File API

The target of this API is to publish a list of available documents for each distributor. With this metadata, we enable the distributor to retrieve a document directly using a SOAP method `getDocument`, which is described later in this document.

Content and format of metadata files is the same SOAP, REST and widget API.

3.1. Metadata attributes

Below all the metadata attributes are described. The explicit representation in the file format is shown in a later chapter ([CSV format: Consolidated metadata file](#)).

No	Name	Type	Condition	Description and Rule
1	Modifier	String	Mandatory	<p>Describes the modification type of a metadata record:</p> <p>Full files contain following modifier: S = Static: In the full file delivery, all records are marked as static. The full delivery provides a daily overview of all reachable documents from the SIX DocHub.</p> <p>Delta files contain following modifiers: N = New: New document with metadata is available. M = Modify: Changes in the metadata.</p>
2	Document ID	String	Mandatory	<p>Delivers the unique document id (SIX DocHub wide) which is needed for downloading the document. Within a metadata file are no duplicates of a document id.</p>
3	General Identifiers	String (Sorted List, 1-n)	Mandatory	<p>A sorted list of "General Scheme Type" and "General Identifiers".</p> <p>The format of the list is described as below.</p> <ul style="list-style-type: none"> List element: General Scheme Type + "=" + General Identifier List separator: " " <p>A list example:</p> <ul style="list-style-type: none"> 1=CH0012345678 2=12345678 <p>Special case example: In the case the "General Scheme Type" is filled with "302", the "General Identifier" is enriched with the attribute separator "-" and the attribute "Contract Side Type".</p> <ul style="list-style-type: none"> Example 1 (Swiss Valorennumber and contract side long): Value: 302=94647315-1 Example 2 (Swiss Valorennumber and contract side short): Value: 302=94647315-2
4	Document Type	Integer	Mandatory	Describes the business type of document.
5	Language	String	Mandatory	Describes the language of the document. The values have to be according to ISO 639-1 (two letter code) . In lower case letters and the value "u0" for unknown.
6	Jurisdictions	String (Sorted List, 1-n)	Mandatory	<p>A sorted list of countries in which the document is valid. The values have to be according to ISO 3166-1 (two letter code) in capital letters and the value "U0" for not applicable or unknown.</p> <p>The format of the list is described as below.</p> <ul style="list-style-type: none"> List element: Jurisdiction List separator: " "
7	MIME Type	Integer	Mandatory	Describes the type of the document. In the first stage, only PDF (application/pdf) documents are supported.

8	Generation Method Type	Integer	Mandatory	Describes the method of the document generation (on the fly or produced in advance).
9	Document Supplier	String	Optional	This information indicates from which source a document Metadata Entry is supplied.
10	Issuer Identifiers	String (Sorted List, 1-n)	Optional	A sorted list of " Institution Scheme Type " and "Institution Identifiers".
11	Availability	Boolean	Mandatory	Describe if a document is available at the current time: <ul style="list-style-type: none"> 0 = not available 1 = available Not available means that the document was recalled/ deleted and can no longer be requested. Archived copies of earlier requested documents can still be loaded from the archive.
12	Publication Classification Type	Integer	Mandatory	Describes the intended accessibility of a document on the distributor side (DocHub clients). The Supplier informs the distributor, if he is allowed to publish the document (e.g. on his website in a public area where no password is needed).
13	Sourcing Strategy Type	Integer	Mandatory	Describes the the role of the supplier in respect of document distribution. Indicates the best source, when there are multiple matches for a document search.
14	LastUpdateTime stamp	Timestamp	Optional	Last update timestamp as delivered by the supplier Example: 2021-01-12T11:00:00+01:00
15	LastGenerationTimestamp	Timestamp	Optional	Last generation timestamp as delivered by the supplier Example: 2020-12-11T11:00:00+01:00
16	Valid From	Date	Optional	Start date when the document is valid
17	Valid To	Date	Optional	End date until the document is valid
18	Record Date	Date	Optional	Record date of the document

Table 1: Metadata attributes

3.2. Optional settings for the delivery of metadata

Over the time the content of the metadata file has been enhanced. To avoid software changes on distributor side the enhancement have been included as optional.

Following enhancements are possible:

- Delivery of Source strategy type
- Delivery of timestamps
 The might produce additional lines in the delta files, when there was only a change timestamps
- **Deliver unknown values for language (u0) and jurisdiction (U0)**
 Delivers also documents where the language or jurisdiction could not be assigned

3.3. CSV format: Consolidated metadata file

The consolidated metadata file consists of three elements.

Header: Each file starts with a header that contains the following elements (elements are separated with ";"):

- The text "**start**".
- The creation timestamp in the format "yyyyMMdd_HHmms_Szzz".
- The **SIX customer id** of the distributor.
- The **SIX customer name** of the distributor.
- The API version, for example version 3 = "**version=3.1**".

Body: The body of the file starts with the metadata attributes header and a list of metadata. The field separator is ";". In case a field contains a sorted list the elements are separated by | (Pipe character).

Footer: Each file ends with a footer that contains the following elements (the elements are separated with ";"):

- The text **“end”** indicates when a file is finished.
- The count of the records in the body **“records=12”**.

Sample Body content:

No	Name	CSV-Name	Type (length)	Example
1	Modifier	Mod	String (1)	N
2	Document ID	DocumentID	String (64)	abcdefghijklmnopqrstuvwxy
3	General Identifiers	GeneralIdentifiers	String (800) (Sorted List, 1-n)	Concatenation: “ General Scheme Type ” + “=” + “ Instrument ID ” Two examples: • 2=12345678 • 1=CH0012345678 2=12345678
4	Document Type	DocumentType	Integer	1
5	Language	Language	String (2)	de
6	Jurisdictions	Jurisdictions	String (200) (Sorted List, 1-n)	AT CH DE
7	MIME Type	MIMETYPE	Integer	1
8	Generation Method Type	GenerationMethodType	Integer	1
9	Document Supplier	DocumentSupplier	String (128)	Bank Sun
10	Issuer Identifiers	IssuerIdentifiers	String (800) (Sorted List, 1-n)	Concatenation: “ Institution Scheme Type ” + “=” + “ Institution ID ” 1=876543210 2=888800ABCDEFGHJKLM00
11	Availability	IsAvailable	Boolean	1
12	Publication Classification Type	PublicationClassType	Integer	0
13	Sourcing Strategy Type	SourcingStrategyType	Integer	99

Table 2: Metadata file attributes in CSV format

Further information on the CSV file:

Topic	Description
Encoding	The encoding is UTF-8.
Escape character	If a value contains line breaks (CRLF) or the column separator (e.g. comma (,)) or semicolon (;), the complete value should be enclosed in double-quotes. If in an enclosure case, the value contains double-quotes (“) each double-quote has to be prefix with a double-quote. (RFC 4180). For example: <ul style="list-style-type: none"> • No enclosure: aaa;bbb;ccc (orig. value: aaa/ bbb/ ccc) • No enclosure: a”aa;bbb;ccc (orig. value: aaa/ bbb/ ccc) • Enclosure the column separator: aaa;”b;bb”;ccc (orig. value: aaa/ b;bb/ ccc) Enclosure the column separator and double-quotes: aaa;bbb; “c””c;””c” (orig. value: aaa/ bbb/ c”c;”c)

Table 3: Further information on the CSV file

The following is an example of the consolidated metadata file with 20 rows:

```
start;20160614_041501_+0200;CH-10597;SIX FI Ltd test users; version=3.1
Mod;DocumentID;GeneralIdentifiers;DocumentType;Language;Jurisdictions;MIMEType;GenerationMethodType;DocumentSupplier;IssuerIdentifiers;IsAvailable;PublicationClassType;SourcingStrategyType
S;1234567890abcdef1234567890ghijkl;1=XD0029955925|2=29955925;1;en;GB;1;1;SIX;;1;0;1
S;1234567890abcdef1234567891ghijkl;1=XD0029955925|2=29955925;1;de;CH|DE;1;1;SIX;;1;0;1
S;1234567890abcdef1234567892ghijkl;1=XD0029955925|2=29955925;1;fr;FR;1;1;SIX;;1;0;1
S;1234567890abcdef1234567893ghijkl;1=XD0029955925|2=29955925;1;it;IT;1;1;SIX;;1;0;1
S;0987654321zyxwvu0987654321tsrqpo;1=XD0029955933|2=29955933;2;en;GB;1;1;Seven;;1;1;2
S;0987654321zyxwvu0987654322tsrqpo;1=XD0029955933|2=29955933;2;de;AT|CH|DE;1;1;Seven;;1;1;2
S;0987654321zyxwvu0987654323tsrqpo;1=XD0029955933|2=29955933;2;fr;FR;1;1;Seven;;1;1;2
S;0987654321zyxwvu0987654324tsrqpo;1=XD0029955933|2=29955933;2;it;IT;1;1;Seven;;1;1;2
S;24687asdfghjkl13576;301=DE2468013579-1;1;en;GB;1;2;Eurex;1=11223344;1;0;99
S;24687asdfghjkl13577;301=DE2468013579-1;1;de;AT|CH|DE;1;2;Eurex;1=11223344;1;0;99
S;24687asdfghjkl13578;301=DE2468013579-2;1;en;GB;1;2;Eurex;1=11223344;1;0;99
S;24687asdfghjkl13579;301=DE2468013579-2;1;de;AT|CH|DE;1;2;Eurex;1=11223344;1;0;99
S;123451234512345asdfasdf;1=ES1231231231;1;es;ES;1;1;ONE;;1;0;99
S;567895678956789fdsafdsaf;2=78865544;1;de;CH;1;1;ONE;;1;0;99
S;765476547654hgfhgfhgfhgfhg;3= 514019;1;de;AT|CH|DE;1;1;ONE;;1;0;99
S;8888777766665555qwert01;302=88776665-1;1;fr;FR|CH;1;2;NewEurex;;1;0;99
S;8888777766665555qwert02;302=88776665-2;1;fr;FR|CH;1;2;NewEurex;;1;0;99
S;YXABABCDEF GHIOP20180128531111;303="YXAB;ABCDEF GHI;O;P;2018-01-28;5.31-1";1;de;AT|CH|DE;1;2;AnotherExchange;;1;0;1
S;YXABABCDEF GHIOC2018012811281111;303="YXAB;ABCDEF GHI;O;C;2018-01-28;11.28-1";1;de;AT|CH|DE;1;2;AnotherExchange;;1;0;1
S;XEURFGBLFF2019031501111;303="XEUR;FGBL;F;F;2019-03-15;0-1";1;de;AT|CH|DE;1;2;AnotherExchange;;1;0;1
end;records=20
```

Figure 2: Example of a full metadata file

3.4. Interface behavior and description

3.4.1. Consolidated metadata file types

The consolidated metadata interface supports two different file delivery modes:

- **“Full” metadata file:** On a daily basis, the SIX DocHub generates a single file with the full metadata of all available documents for the distributor. In this file, the attribute Modifier will always be set to “S” (static). The window of the full file delivery is recommended between 21:00 and 05:00 UTC. The time when the process is scheduled in the SIX DocHub, will be defined during the onboarding process.
- **“Delta” metadata file:** During the day, the SIX DocHub can generate delta file deliveries for the distributors to update the information. The “Delta” delivery is optional but recommended. In the “Delta” metadata records can be changed (Modifier = “M”), new documents introduced (Modifier = “N”) or deleted documents removed from the active list (Modifier = “M” and Availability = 0). The delta files contain only the records modified since the last sent file. The standard interval of starting the process of a delta file delivery is defined to every 30 minutes. The exact time will be defined during the onboarding process (steps in 15 minutes).
In case no metadata has changed during the interval, an empty file is generated.

```
start;20160613_100501_+0200;CH-10597;SIX FI Ltd test users;version=3.1
Mod;DocumentID;GeneralIdentifiers;DocumentType;Language;Jurisdictions;MIMEType;GenerationMethodType;DocumentSupplier;IssuerIdentifiers;IsAvailable;PublicationClassType;SourcingStrategyType
end;records=0
```

Figure 3: Example of an empty metadata file

3.4.2. Filter capabilities

In case a distributor needs only metadata in dedicated languages, jurisdiction and document types DocHub can filter the content of metadata files. Only matching entries are delivered which have passed the defined filters based on Jurisdictions, Document Types and Languages. The setup of filters has to be requested towards SIX customer support. Per default no filter is in place.

3.4.3. Delivery technology

Distributors can retrieve consolidated metadata files from SFTP server. Beside production also a test environment is available. Access is done with different users, which are communicated during onboarding. In case of special requirements regarding the access to the metadata file please contact SIX onboarding manager or SIX customer support.

3.4.4. File access from SIX SFTP server

Metadata files are available on SIX SFTP server to be retrieved by the distributors. See DocHub_Environments_Testing manual for more details.

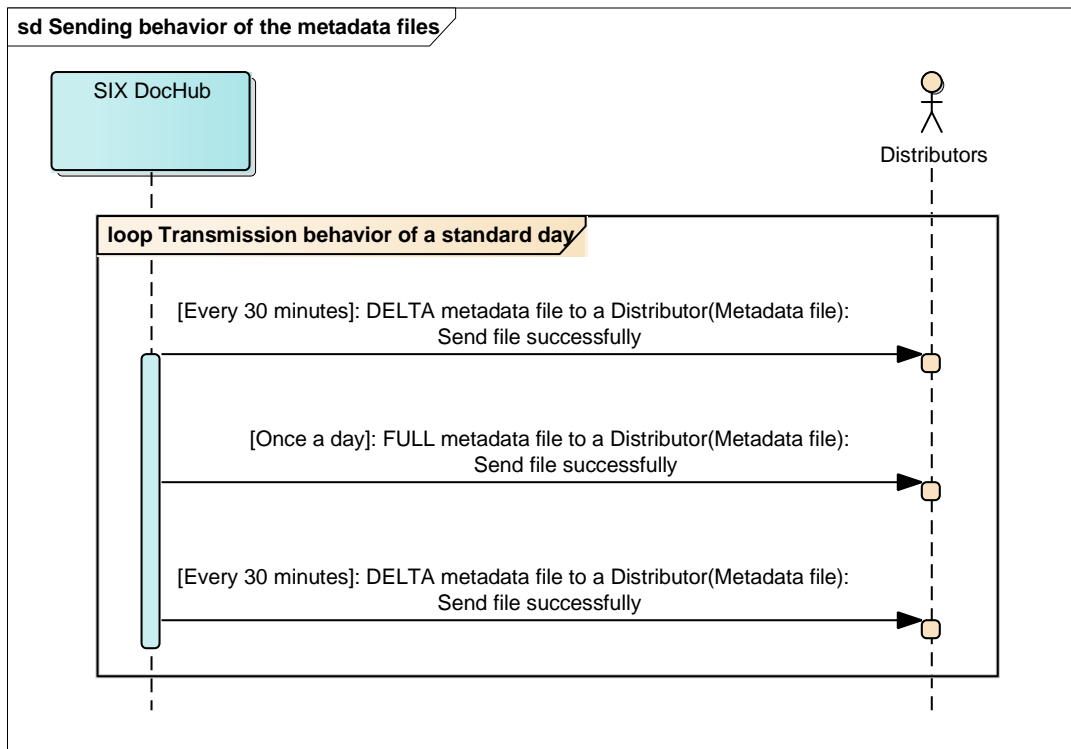


Figure 4: Example of a metadata file

3.4.5. Sample metadata file deliveries

Subsequent five examples files are intended to describe a possible course of the day (without empty files). For easier understanding of the examples the document ID is started with subsequent codes. In real live these IDs are random unique strings.

3.4.5.1. A full metadata file with six records for the first day.

```
start;20160613_041501_+0200;CH-10597;SIX FI Ltd test users;version=3.1
Mod;DocumentID;GeneralIdentifiers;DocumentType;Language;Jurisdictions;MIMEType;GenerationMethodType;DocumentSupplier;IssuerIdentifiers;IsAvailable;PublicationClassType;SourcingStrategyType
S;a01234567890abcdef12345678ghijkl;1=XD0029955925|2=29955925;1;en;GB;1;1;SIX;;1;0;1
S;a11234567890abcdef12345678ghijkl;1=XD0029955925|2=29955925;1;de;CH|DE;1;1;SIX;;1;0;1
S;a21234567890abcdef12345678ghijkl;1=XD0029955925|2=29955925;1;fr;FR;1;1;SIX;;1;0;1
S;b10987654321zyxwvu09876543tsrqpo;1=XD0029955933|2=29955933;2;en;GB;1;1;Seven;;1;1;2
S;b20987654321zyxwvu09876543tsrqpo;1=XD0029955933|2=29955933;2;de;DE;1;1;Seven;;1;1;2
S;b30987654321zyxwvu09876543tsrqpo;1=XD0029955933|2=29955933;2;fr;FR;1;1;Seven;;1;1;2
end;records=6
```

Figure 5: Delivery 1, Full metadata file for day 1

3.4.5.2. The first delta metadata file

It contains two new documents (ids starting with a3,a4) for the ISIN XD0029955925.

```
start;20160613_121501_+0200;CH-10597;SIX FI Ltd test users;version=3.1
Mod;DocumentID;GeneralIdentifiers;DocumentType;Language;Jurisdictions;MIMEType;GenerationMethodType;DocumentSupplier;IssuerIdentifiers;IsAvailable;PublicationClassType;SourcingStrategyType
N;a31234567890abcdef12345678ghijkl;1=XD0029955925|2=29955925;1;it;IT;1;1;Two;;1;1;1
N;a41234567890abcdef12345678ghijkl;1=XD0029955925|2=29955925;1;de;AT|CH;1;1;Two;;1;1;1
end;records=2
```

Figure 6: Delivery 2, Delta metadata file 01 for day 1

3.4.5.3. The second delta metadata file

It contains two updates for documents ids starting with a3,a4 related to ISIN XD0029955925 (a3 change Jurisdiction from IT to CH|IT, a4 change Jurisdiction from AT|CH to AT) and two new documents (ids starting with b4 and b5) for ISIN XD0029955933.

```
start;20160613_144501_+0200;CH-10597;SIX FI Ltd test users;version=3.1
Mod;DocumentID;GeneralIdentifiers;DocumentType;Language;Jurisdictions;MIMEType;GenerationMethodType;DocumentSupplier;IssuerIdentifiers;IsAvailable;PublicationClassType;SourcingStrategyType
M;a31234567890abcdef12345678ghijkl;1=XD0029955925|2=29955925;1;it;CH|IT;1;1;Two;;1;0;1
M;a41234567890abcdef12345678ghijkl;1=XD0029955925|2=29955925;1;de;AT;1;1;Two;;1;0;1
N;b40987654321zyxwvu09876543tsrqpo;1=XD0029955933|2=29955933;2;it;IT;1;1;Seven;;1;1;2
N;b50987654321zyxwvu09876543tsrqpo;1=XD0029955933|2=29955933;2;de;AT|CH;1;1;Seven;;1;1;2
end;records=4
```

Figure 7: Delivery 3, Delta metadata file 02 for day 1

3.4.5.4. The third delta metadata file

It contains one update for for document id starting with a4 related to ISIN XD0029955925 (change IsAvailable from 1 to 0). This means that the document can no longer be requested.

```
start;20160613_181501_+0200;CH-10597;SIX FI Ltd test users;version=3.1
Mod;DocumentID;GeneralIdentifiers;DocumentType;Language;Jurisdictions;MIMEType;GenerationMethodType;DocumentSupplier;IssuerIdentifiers;IsAvailable;PublicationClassType;SourcingStrategyType
M;a41234567890abcdef12345678ghijkl;1=XD0029955925|2=29955925;1;de;AT;1;1;Two;;0;0;1
end;records=1
```

Figure 8: Delivery 4, Delta metadata file 03 for day 1

3.4.5.5. The fourth delta metadata file

It contains an update for document id starting with b5 related to ISIN XD0029955933 (Add the jurisdiction DE to the existing two jurisdictions AT|CH).

```
start;20160613_181501_+0200;CH-10597;SIX FI Ltd test users;version=3.1  
Mod;DocumentID;GeneralIdentifiers;DocumentType;Language;Jurisdictions;MIMEType;GenerationMethodType;DocumentSupplier;IssuerIdentifiers;IsAvailable;PublicationClassType;SourcingStrategyType  
M;b50987654321zyxwvu09876543tsrqpo;1=XD0029955933|2=29955933;2;de;AT|CH|DE;1;1;Seven;;1;1;  
2  
end;records=1
```

Figure 9: Delivery 5, Delta metadata file 04 for day 1

3.4.5.6. A full metadata file with eight records for the second day.

```
start;20160614_041501_+0200;CH-10597;SIX FI Ltd test users;version=3.1  
Mod;DocumentID;GeneralIdentifiers;DocumentType;Language;Jurisdictions;MIMEType;GenerationMethodType;DocumentSupplier;IssuerIdentifiers;IsAvailable;PublicationClassType;SourcingStrategyType  
S;a01234567890abcdef12345678ghijkl;1=XD0029955925|2=29955925;1;en;GB;1;1;SIX;;1;0;1  
S;a11234567890abcdef12345678ghijkl;1=XD0029955925|2=29955925;1;de;CH|DE;1;1;SIX;;1;0;1  
S;a21234567890abcdef12345678ghijkl;1=XD0029955925|2=29955925;1;fr;FR;1;1;SIX;;1;0;1  
S;a31234567890abcdef12345678ghijkl;1=XD0029955925|2=29955925;1;it;CH|IT|IT;1;1;Two;;1;0;1  
S;b10987654321zyxwvu09876543tsrqpo;1=XD0029955933|2=29955933;2;en;GB;1;1;Seven;;1;1;2  
S;b20987654321zyxwvu09876543tsrqpo;1=XD0029955933|2=29955933;2;de;AT|CH|DE;1;1;Seven;;1;1;  
2  
S;b30987654321zyxwvu09876543tsrqpo;1=XD0029955933|2=29955933;2;fr;FR;1;1;Seven;;1;1;2  
S;b40987654321zyxwvu09876543tsrqpo;1=XD0029955933|2=29955933;2;it;IT;1;1;Seven;;1;1;2  
S;b50987654321zyxwvu09876543tsrqpo;1=XD0029955933|2=29955933;2;de;AT|CH|DE;1;1;Seven;;1;1;  
2end;records=8
```

Figure 10: Delivery 6, Full metadata file day 2

3.4.6. Filename convention

For unique identification, a special naming convention of the files is established. The underline sign separates the elements. The filename is not case sensitive.

3.4.6.1. Default structure

yyyyMMdd_HHmss_DataType_Delivery_SequenceNumber.File

Example: 20160427_140522_M_F_00001.csv.gz

Element	Example	Description
yyyyMMdd	20160427	The date of the creation of the file: <ul style="list-style-type: none"> • yyyy = year • MM = month • dd = day
HHmss	140522	The time of the creation of the file: <ul style="list-style-type: none"> • HH = hour • mm = minute • ss = second
DataType	M	The data type field shows if in the file are metadata or content data. <ul style="list-style-type: none"> • M = Metadata.
Delivery	F	The delivery field offers the possibility to send periodically delta data. <ul style="list-style-type: none"> • F = Full delivery of all reachable documents. • D = Delta delivery science the last delivery.
SequenceNumber	00001	The sequence number is an ascending number that is assigned by the SIX DocHub. <ul style="list-style-type: none"> • 5 -digit number: The number will be reset every day and starts again with 00000.
File	.csv.gz	The file extension according to the used file format: <ul style="list-style-type: none"> • .csv.gz (csv file compressed in gzip file format)

Table 4: Structure of the filename

3.4.6.2. Other file name structure

In case there is an urgent need by the customer, the file name can be configured individually in the onboarding process. Each file name consists of a prefix, a center part and a postfix which are separated with the character "." Within each part the elements can be separated by the character "_".

Example: F1.20160427_140657_M_F.FULL.00001

(default file name: 20160427_140522_M_F_00001.csv.gz)

Parts	SIX default structure	Other structure (Example)
Prefix. (0-3)		- (String("F1"))
Center part	(yyyyMMdd) (HHmss) (DataType) (Delivery) (SequenceNumber)	(yyyyMMdd) (HHmss) (DataType) (Delivery)
.Postfix (0-3)	- (File)	- (if (Delivery.equals("F")) then String("FULL")) (if (Delivery.equals("D")) then String("DELTA")) - (SequenceNumber)

Table 5: Individual file name configuration

4. DocHub SOAP API

This section describes the SOAP API and the methods to retrieve documents from the SIX DocHub.

4.1. General details

4.1.1. API versions

The SIX DocHub API provides currently Version 3.1, Previous version 1.0 and 2.0 are decommissioned end of November 2021 as announced in May 2020. Until then they are supported. Customer using these version are supposed to switch to the current version before November 2021.

In general decommissioning of API versions is announced in Release Notes.

4.1.2. Certificate Validity Period

The DocHub certificate on all environments is valid for a one year period cycle ends every year on August, 12th. The SwissSign RSA TLS OV ICA certificate is issued by SwissSign. SIX recommends to not pin the certificate on client side since the certificate will change frequently. Moreover, The biggest problem with pinning is that you lose the ability to respond to certificate issues on a short schedule.

4.1.3. Environments

4.1.3.1. Production PROD

No	Topic	Short Description
1	Base URL	The base URL using for GUI access: https://www.six-dochub.com
2	WSDL file	WSDL file is available at following location: https://www.six-dochub.com/api/soap/v3_1/dochub.wsdl

Table 6: Overview of the API Document retrieval (production environment)

4.1.3.2. Test

No	Topic	Short Description
1	Base URL	The base URL using for GUI access: https://test.six-dochub.com
2	WSDL file	WSDL file is available at following location: https://test.six-dochub.com/api/soap/v3_1/dochub.wsdl
3	Username and password for using SOAP API	The username and the password will be provided during the onboarding process for the test system.

Table 7: Overview of the API Document retrieval (customer test environment 1, member test 1)

4.1.4. Authorization

In order to authorize at the API, the user needs to request a token using method “getAuthorizationToken”. All other methods need to contain the authorization HTTP request header with authentication scheme “Bearer” (according to RFC 6750) and a valid token as credentials.

Example: Authorization for token eyJhbGciOiJIUzI1NiJ9...eyJyYb
Authorization: Bearer eyJhbGciOiJIUzI1NiJ9...eyJyYb

The method “getAuthorizationToken” delivers a new token, when no user session is active. A user session is the time during this token is valid. The number of parallel request sessions within a user session is limited (typically 32). A request session is the time between arrival and completion of a request.

An application with parallel processing might share the token. In case a requests fails due to wrong authorization, "getAuthorizationToken" with valid credentials delivers a new token which is valid.

In case of requesting a new request session and the maximum number is reached a SOAP fault will be returned. Then the application needs to wait until a request session completes.

A token expires under following conditions:

- Idle condition
 When no request has been received after a predefined time (typically 15 minutes)
- Maximum time exceeded
 A token has a predefined maximum lifetime (typically one day). In case a user session is active and the maximum time is reached the user session is closed

4.1.5. Use of search in API

When you specific a search item, search is restricted to DMD entries containing data for this item.

Example: When you specify the restriction:

```
<issuerIdentifier schemeType="1"></issuerIdentifier>
```

DMD data without GK Key are not found.

The API supports search via entering the entire text or a substring of the text. Internally the substring is supplemented with asterisk (“*”) at the end. Please note: if you want to use “*” at the beginning of a text search you have to specify it explicitly in the search parameter. Be aware that searches are case sensitive.

Searching part	Automatic enrichment	Result
docu	docu*	Hit: “ document ”
Docu	Docu*	There is no hit, due to case sensitivity
cume	cume*	There is no hit
*cume	*cume*	Hit: “ document ”

Table 8: Search examples

4.2. Methods

4.2.1. Overview of all methods

No	Method	Documented	Short Description
1	getAuthorizationToken	DocHub API	Get an authorization token from the system via login.
2	getDocument	DocHub API	Get a document.
3	searchDocument	DocHub API	Search for a document with using different parameters.
4	getArchivedDocument	DocHub API	Get a document out of the archive.
5	searchArchivedDocument	DocHub API	Search for a document out of the archive with using different parameters.
6	createOnTheFlyPRIIPKID (DocGen contract needed)	DocHub API - Extension (on the fly PRIIP KID)	Create an on the fly PRIIP KID using the supplied attributes.
7	createPIB (3rd party contract needed)	DocHub API - Extension (PIB)	Create an on the fly PIB.
8	getSIXStatusInformation	DocHub API	Get SIX status information of an instrument.

Table 9: Overview of the SIX DocHub SOAP API methods

The syntax of the request methods, their arguments and the response messages are described in the following chapters.

4.2.2. Overview of all “request parameters” of the methods

Request parameter	Type	Method	Description and Rule
archive	Boolean	2	Defines whether the request document is to be archived: <ul style="list-style-type: none"> false = Do not archive (default) true = Archive
archiveID	String (64)	4	The archiveID is an alphanumeric String with a maximum of 64 characters. The attribute archiveID is provided every time a document is called using the method “ getDocument ” with the request parameter “ archive ” set to “ true ”.
customData1	String (16)	2, 4	This field gives the distributor the opportunity to provide some calling parameters for his reporting.
customData2	String (16)	2, 4	This field gives the distributor the opportunity to provide some calling parameters for his reporting.
customData3	String (16)	2, 4	This field gives the distributor the opportunity to provide some calling parameters for his reporting.
customData4	String (64)	2, 4	This field gives the distributor the opportunity to provide some calling parameters for his reporting.
customData5	String (64)	2, 4	This field gives the distributor the opportunity to provide some calling parameters for his reporting.
documentID	String (64)	2, 5	The documentID is an alphanumeric String with a maximum of 64 characters. The attribute documentID is provided by the metadata file or by the request method “ searchDocument ”.
documentSupplier	String (128)	3, 5	This information indicates from which source a document is sourced.
documentTypes	Integer (List, 1-n)	3	Document types of the requested document.
documentType	Integer	3, 5	Document Type describes the business type of document.
issuerIdentifier	composition	3, 5	A pair of an institution scheme type and an institution id (see next parameter).
institutionID	String (64)	3, 5	Institution id in format of the institution scheme type, see next parameter.
institutionSchemeType	Integer	3, 5	<u>Institution Scheme Type</u> of the institution id.
generalIdentifier	composition	3, 5	A pair of an General Scheme Type and an instrument id (see next parameter).
instrumentID	String (64)	3, 5	Instrument id in format of the General Scheme Type , see next parameter.
generalSchemeType	Integer	3, 5	General Scheme Type of the instrument id.
jurisdictionCodes	String (2) (List, 1-n)	3	The countries in which the document is valid. The values have to be according to ISO 3166-1 (uppercase two letter code) or “U0” for unknown.
jurisdiction	String (2)	3, 5	The country in which the document is valid. The values have to be according to ISO 3166-1 (two letter code).
languageCodes	String (2) (List, 1-n)	3	Languages of the requested documents. The values have to be according to ISO 639-1 (lowercase two letter code) or “u0” for unknown.
language	String (2)	3, 5	Language of the requested document. The values have to be according to ISO 639-1 (two letter code) .
listLimit	Integer	3, 5	The number of delivered results (default: 100/ maximum: 100).
listPage	Integer	3, 5	The result page in combination with the attribute listLimit. Example: listLimit = 10, listPage = 2: The result will be the search entries from 11 to 20.
mimeType	Integer	3, 5	<u>MIME Type</u> of the document.
password	String (64)	1	The password for the technical user account of the distributor. The password is stored in the database as a hash value.

storedCustomData1	String (16)	5	This attribute allows the distributor to search in the archive for its own customData1 attribute.
storedCustomData2	String (16)	5	This attribute allows the distributor to search in the archive for its own customData2 attribute.
storedCustomData3	String (16)	5	This attribute allows the distributor to search in the archive for its own customData3 attribute.
storedCustomData4	String (64)	5	This attribute allows the distributor to search in the archive for its own customData4 attribute.
storedCustomData5	String (64)	5	This attribute allows the distributor to search in the archive for its own customData5 attribute.
username	String (64)	1	The username of a technical user account of the distributor.

Table 10: Overview of all request parameters

4.2.3. Overview of all “response parameters” of the methods

Response parameter	Type	Method	Description and Rule
archiveID	String (64)	2, 4, 5	The archiveID is an alphanumeric String with a maximum of 64 characters.
authorizationToken	String (1024)	1	The user’s authorization token. A token for a technical user account is typically valid for 15 minutes.
delDate	Date	8	Date when instrument becomes inactive.
document	Base64 Binary	2, 4	The document itself. Sent with an UTF-8-Encoding and base64 encrypted.
documentID	String (64)	2, 3, 4, 5	The documentID is an alphanumeric String with a maximum of 64 characters.
documentSupplier	String (128)	3, 4, 5	The name of the issuer or the name of the 3rd Party Suppliers (for more details see Document Supplier).
documentType	Integer	3, 4, 5	Document Type describes the business type of document.
fidlegScopeIndicator	Integer	8	The FIDLEG scope indicator of an instrument indicates whether the instrument needs a KID or not. 1 Liable/applicable 2 Potentially liable/applicable 12 Liable/applicable - confirmed 3 Exempt/not liable/applicable 11 Potentially not liable/applicable 13 not liable/applicable - confirmed
generationMethodType	Integer	2, 3, 4, 5	Generation Method Type describes the method of the document generation (on the fly or produced in advance).
generalIdentifiers	String (64) (List, 1-n)	3, 4, 5	A list of “ General Scheme Type ” and “Instrument Identifiers”.
instrumentStatus	Integer	8	Indicates the status of the instrument. 1 Not yet issued 4 Inactive 7 In liquidation/dissolution The instrument will be taken back following the sale of the company's or fund's assets and subsequent dissolution/liquidation. 8 Active 9 In default Debt instruments where the interest or redemption payments were not made as originally provided for in the prospectus or where payments discontinued.
issuerIdentifiers	String (64) (List, 1-n)	3, 4, 5	A list of “ Institution Scheme Type ” and “Institution Identifiers”.
jurisdictionsCodes	String (2) (List, 1-n)	3, 4, 5	The country in which the document is valid. The values have to be according to ISO 3166-1 (two letter code) or “U0” for unknown.
languageCodes	String (2) (List, 1-n)	3, 4, 5	Language of the requested document. The values have to be according to ISO 639-1 (two letter code) or “u0” for unknown.
mimeType	Integer	2, 3, 4, 5	MIME Type of the document.

plausibility	String (64)	2	<p>This field plausibility is defined as a string field. Currently it is implemented as a sequence of integer values combined with the sign “ ”:</p> <p>Part 1: Check of the number of pages of the document:</p> <ul style="list-style-type: none"> 0 = Incorrect, more than three pages. 1 = Correct, less or exactly three pages. <p>Part 2: Examination of the range of the file size (Each supplier defines his own barrier of the file size):</p> <ul style="list-style-type: none"> 0 = File size outside the definition. 1 = File size within the definition. <p>Example: 1 1: The document has less or exactly three pages and is in the definition of the file size from the supplier.</p> <p>Plausibility check execution not possible: If a single plausibility check can't be done (due to a lack of calculation basis) this will be indicated with the value -1.</p> <p>Example: 1 -1: The document has less or exactly three pages. In case the definition of file size is missing, the indication if the file size is within the given parameter can't be answered.</p>																																																				
priipScopeIndicator	Integer	8	<p>The PRIIP scope indicator of an instrument indicates whether the instrument needs a KID or not.</p> <p>1 Liable/applicable 2 Potentially liable/applicable 12 Liable/applicable - confirmed 3 Exempt/not liable/applicable 11 Potentially not liable/applicable 13 not liable/applicable - confirmed</p>																																																				
requestProcessingTimeExternal	Integer	2, 4	Shows the time in milliseconds (ms) that is needing to request the document outside of the SIX DocHub.																																																				
requestProcessingTimeInternal	Integer	2, 4	Shows the time in milliseconds (ms) for the SIX DocHub internal processes for providing the document.																																																				
sixSecurityType	String (1)	8	<p>The SIX Security Type indicates the type of an instrument</p> <table border="1"> <thead> <tr> <th>Symbol</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>A</td><td>Rights/Subs. Rights/Claims/Fraction acc.</td></tr> <tr><td>B</td><td>National currencies</td></tr> <tr><td>C</td><td>Trust certificate unit/fund, investment foundation units</td></tr> <tr><td>D</td><td>Part in cooperative society</td></tr> <tr><td>E</td><td>Deposit and Saving books</td></tr> <tr><td>F</td><td>REPO/Securities Lending and Borrowing</td></tr> <tr><td>H</td><td>Synthetic instrument</td></tr> <tr><td>I</td><td>Forward transactions</td></tr> <tr><td>J</td><td>Combined transactions</td></tr> <tr><td>K</td><td>Technical instrument</td></tr> <tr><td>L</td><td>FRN/Variables/Grad., index-link interest</td></tr> <tr><td>M</td><td>Leveraged products</td></tr> <tr><td>N</td><td>REPO-Basket</td></tr> <tr><td>O</td><td>ETD Contract specification</td></tr> <tr><td>P</td><td>Futures</td></tr> <tr><td>Q</td><td>Money market instr. (CD/CP)</td></tr> <tr><td>R</td><td>Commodities</td></tr> <tr><td>S</td><td>Other instruments with cash-flow</td></tr> <tr><td>V</td><td>Convertibles</td></tr> <tr><td>X</td><td>Technical currencies</td></tr> <tr><td>Y</td><td>Indices</td></tr> <tr><td>Z</td><td>Options (call/put)</td></tr> <tr><td>0</td><td>Bond, compound instr. cons.of several bonds</td></tr> <tr><td>1</td><td>Shares/Units with shares/Particip. Cert.</td></tr> <tr><td>2</td><td>DE saving bonds/Collect.sec.No BK accept.</td></tr> </tbody> </table>	Symbol	Description	A	Rights/Subs. Rights/Claims/Fraction acc.	B	National currencies	C	Trust certificate unit/fund, investment foundation units	D	Part in cooperative society	E	Deposit and Saving books	F	REPO/Securities Lending and Borrowing	H	Synthetic instrument	I	Forward transactions	J	Combined transactions	K	Technical instrument	L	FRN/Variables/Grad., index-link interest	M	Leveraged products	N	REPO-Basket	O	ETD Contract specification	P	Futures	Q	Money market instr. (CD/CP)	R	Commodities	S	Other instruments with cash-flow	V	Convertibles	X	Technical currencies	Y	Indices	Z	Options (call/put)	0	Bond, compound instr. cons.of several bonds	1	Shares/Units with shares/Particip. Cert.	2	DE saving bonds/Collect.sec.No BK accept.
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			3	Coupon/Talon (inactive)
			4	Other instruments without cash-flow (inactive)
			5	Insurance policies
			6	Structured instruments
			7	Trust-Shares
			8	Interest Rate
			9	Rest-Quota attestation
sourcingStrategyType	Integer		3	Describes the role of the supplier in respect of document distribution. Indicates the best source, when there are multiple matches for a document search. Possible values are described in the attribute table document.
status Code	Integer		All	Returns the status of the Web service invocation (Status Code).
storedCustomData1	String (16)		4, 5	This attribute includes the value of the customData1 attribute, exactly as the distributor gave it when the " getDocument " function was called.
storedCustomData2	String (16)		4, 5	This attribute includes the value of the customData2 attribute, exactly as the distributor gave it when the " getDocument " function was called.
storedCustomData3	String (16)		4, 5	This attribute includes the value of the customData3 attribute, exactly as the distributor gave it when the " getDocument " function was called.
storedCustomData4	String (64)		4, 5	This attribute includes the value of the customData4 attribute, exactly as the distributor gave it when the " getDocument " function was called.
storedCustomData5	String (64)		4, 5	This attribute includes the value of the customData5 attribute, exactly as the distributor gave it when the " getDocument " function was called.
timestamp	composition		2, 4, 5	A pair of a timestamp type and a timestamp value (see next parameter).
timestampValue	DateTime		2, 4, 5	DateTime in format yyyy-mm-ddThh:mm:ss.ssszzzzz (see: Web service: Definition of the attribute type dateTime)
timestampType	Integer		2, 4, 5	The Timestamp Type describes the context of the attribute timestamp.
totalHits	Long		3, 5	The total number of results

Table 11: Overview of all response parameters

4.2.4. Method getAuthorizationToken

The method “getAuthorizationToken” enables the access to DocHub, when valid username and password has been supplied. A technical user is required to login. Is this the case, a token is returned. This token must be used for subsequent data requests. If the login credentials are invalid a SOAP fault will be returned. See also chapter 4.1.4 Authorization for more details.

Request parameter	Mandatory
username	Yes
password	Yes

Table 12: Request parameters getAuthorizationToken

Response parameter	Mandatory
token	Yes
statusCode	Yes

Table 13: Response parameters getAuthorizationToken

Example SOAP Version V3.1:

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:v3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1/">
  <soapenv:Header />
  <soapenv:Body>
    <v3:getAuthorizationTokenRequest>
      <username>TesterXXX</username>
      <password>abcdefg12345</password>
    </v3:getAuthorizationTokenRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Figure 11: SOAP V3_1: Example of the request of the method getAuthorizationToken

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header />
  <SOAP-ENV:Body>
    <ns3:getAuthorizationTokenResponse
      xmlns:ns3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1/">
      <authorizationToken>eyJhbGciOi...</authorizationToken>
      <statusCode>1</statusCode>
    </ns3:getAuthorizationTokenResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Figure 12: SOAP V3_1: Example of the response of the method getAuthorizationToken

4.2.5. Method getDocument

The method “getDocument” retrieves the document with the specified “documentID”. If the document is found, the document and metadata will be returned. If an error occurs, a SOAP fault will be returned. In case that a document is delivered and the request argument “archive” is set the document is stored in the archive.

The document is delivered in tag <document> you need to store the content to get a PDF file. Typically the string is very long. In Figure 15: SOAP V3_1: Example of the response of the method getDocument the points in the string **JVBERi0xLjQ5M0FERUVEM0My.....RcmVmCjg4NDY5CiUIRU9GCgo=** indicate that some information has been omitted.

CustomData1-5 give you the possibility to store some additional infos together with the archived document, e.g. a transaction number, to identify the request. This data is also available in the audit trail.

When a document for an instrument has been updated since the last full or delta consolidated metadata file delivery it might happen, that the document ID is not valid anymore. When requesting an invalid

documentID the specific SOAP fault 320 is returned. In this case please search for the document and retry the access with the new document ID delivered as search result.

Be aware that most of the documents are retrieved from an external server. This is done to ensure delivery of actual documents. Some documents are even created when a document request is received. Since DocHub depends on external servers, we cannot guarantee that a document can be delivered. Furthermore we cannot ensure that a document can be delivered within a predefined time. Especially for big documents with more than 5 MB it might take some time for retrieval.

4.2.5.1. Additional information regarding errors when documents are retrieved.

The **error code** is delivered in the SOAP reply. The **faultstring** and the **error message** can have two parts. A description of the DocHub error and an additional **reference to the details of the error message** separated by “.”.

With the **reference to the details of the error message** our DocHub operation team can get more detailed information about the root cause of the problem.

See Figure 13: SOAP V3_1: Example of an error response of the method `getDocument` for an sample reply. In the give case the connection to the server failed. In respect of external deliveries following error codes are of special interest.

- **305** = An error occurred while reading the document
This error is delivered under following conditions. The list is incomplete.
 - It is not possible to connect to the server (might be caused by a temporary outage, or an invalid certivecate)
 - The delivered data is not a PDF document
The server delivered different information than the document
- **320** = The requested documentID is not available
This error is returned, when the document ID is not available any more. In this case, it doesn't make sense to retry the delivery. It might happen, that documentIDs have changed after the delivery of the most recent metadata file. You can do a search for the document and get the actual document ID
- **330** = Failed to retrieve document
This error code is delivered when the web server is responding the request with an error or a reply without a valid PDF document.

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header />
  <SOAP-ENV:Body>
  <SOAP-ENV:Fault>
    <faultcode>SOAP-ENV:Server</faultcode>
    <faultstring xml:lang="en">(330) Document could not be retrieved: ErrorRef: 9021b9a4-099a-4dea-92ab-28dc5bf2c5b5</faultstring>
    <detail>
      <ns3:docHubFaultMessage xmlns:ns3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1">
        <errorCode>330</errorCode>
        <errorMessage>Document could not be retrieved: ErrorRef: 9021b9a4-099a-4dea-92ab-28dc5bf2c5b5</errorMessage>
      </ns3:docHubFaultMessage>
    </detail>
  </SOAP-ENV:Fault>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Figure 13: SOAP V3_1: Example of an error response of the method `getDocument`

4.2.5.2. getDocument Soap Rest Sequence and example

Request parameter	Mandatory
documentID	Yes
Archive (default: false = Do not archive)	No
customData1	No
customData2	No
customData3	No
customData4	No
customData5	No

Table 14: Request parameters getDocument

Response parameter	Mandatory
documentID	Yes
archiveID	No
Timestamp	No
Plausibility	No
requestProcessingTimeExternal	Yes
requestProcessingTimeInternal	Yes
generationMethodType	Yes
mimeType	Yes
Document	Yes
statusCode	Yes

Table 15: Response parameters getDocument

Example SOAP Version V3_1:

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:v3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1/">
  <soapenv:Header />
  <soapenv:Body>
    <v3:getDocumentRequest>
      <documentID>abcdsespfwmaa1ntp2suwpcv878kudwd</documentID>
      <archive>true</archive>
      <customData1>Cust_1</customData1>
    </v3:getDocumentRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Figure 14: SOAP V3_1: Example of the request of the method getDocument

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header />
  <SOAP-ENV:Body>
    <ns3:getDocumentResponse
      xmlns:ns3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1/">
      <documentID>abcdsespfwmaa1ntp2suwpcv878kudwd</documentID>
      <archiveID>7d55ac5052388c86289561e91d5d3796-1643-1582713331</archiveID>
      <timestamp type="1">2020-02-26T11:35:31.000+01:00</timestamp>
      <plausibility>1|1</plausibility>
      <requestProcessingTimeExternal>1895</requestProcessingTimeExternal>
      <requestProcessingTimeInternal>321</requestProcessingTimeInternal>
      <generationMethodType>9999</generationMethodType>
      <mimeType>1</mimeType>
      <document>JVBERi0xLjQ5M0FERUVEM0My.....
      .....RcmVmCjg4NDY5CiUIRU9GCgo=</document>
      <statusCode>1</statusCode>
    </ns3:getDocumentResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Figure 15: SOAP V3_1: Example of the response of the method getDocument

4.2.6. Method searchDocument

The method “searchDocument” searches for documents matching the specified criteria. Matches are returned as a list with each element representing a document. Returned is the documents “documentID”, its identifier and other metadata. The documents themselves are not part of the response. They need to be requested individually with the method “getDocument”.

If no match is found, an empty list will be returned. To limit the amount of results, the limit parameter can be used (default limit is 100 entries). To request the next part of the results, the page parameter can be set (ex. result has 100 entries, but only show entries 11 to 20 one would set the page parameter to 2 and the limit parameter to 10). If an error occurs, a SOAP fault will be returned.

	Mandatory
Request parameter	
generalIdentifier	No (1, 2)
documentTypes	No (1, 3)
languageCodes	No (1, 3)
jurisdictionCodes	No (1, 3)
mimeType	No (1)
documentSupplier	No (1, 2)
issuerIdentifier	No (1, 2)
listPage	No
listLimit	No

Table 16: Request parameters searchDocument

1. Searches can be performed only by the parameters that are marked with the **number 1**. At least one parameter must be provided.
2. The flagged parameters with the **number 2** are string fields. This kind of field gives the opportunity to search substrings (for more details see chapter 4.1.5 Use of search in API)
3. The parameters with the **number 3** require an subsidiary XML element. It can be used to search multiple values with one search.
 In the example below is a search for de and en language

Example Search SOAP Version V3_1:

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:v3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1/">
  <soapenv:Header />
  <soapenv:Body>
    <v3:searchDocumentRequest>
      <generalIdentifier schemeType="1">DE000GL</generalIdentifier>
      <documentTypes>
        <documentType>1</documentType>
      </documentTypes>
      <languageCodes>
        <languageCode>de</languageCode>
        <languageCode>en</languageCode>
      </languageCodes>
      <jurisdictionCodes>
        <jurisdictionCode>DE</jurisdictionCode>
      </jurisdictionCodes>
    </v3:searchDocumentRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response parameter	Mandatory
A List of	
• documentID	• Yes
• generalIdentifiers	• Yes
• documentType	• Yes
• languageCode	• Yes
• jurisdictionsCode	• No
• mimeType	• Yes
• generationMethodType	• No
• documentSupplier	• No
• issuerIdentifiers	• No
• sourcingStrategyType	• Yes
• lastUpdateTimestamp	• No
• lastGenerationTimestamp	• No
statusCode	Yes
totalHits	Yes

Table 17: Response parameters searchDocument

```
<listLimit>50</listLimit>  
<listPage>2</listPage>  
</v3:searchDocumentRequest>  
</soapenv:Body>  
</soapenv:Envelope>
```

Figure 16: SOAP V3_1: Example of the request of the method searchDocument

```

<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header />
  <SOAP-ENV:Body>
    <ns3:searchDocumentResponse
      xmlns:ns3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1/">
      <documents>
        <document>
          <documentID>abcdsespfwmaa1ntp2suwpsc878kudwd</documentID>
          <generalIdentifiers>
            <generalIdentifier schemeType="2">28460989</generalIdentifier>
            <generalIdentifier schemeType="1">DE000GL2NUG2</generalIdentifier>
            <generalIdentifier schemeType="3">GL2NUG</generalIdentifier>
          </generalIdentifiers>
          <documentType>1</documentType>
          <languageCode>de</languageCode>
          <jurisdictionCodes>
            <jurisdictionCode>AT</jurisdictionCode >
            <jurisdictionCode >CH</jurisdictionCode >
            <jurisdictionCode>DE</jurisdictionCode>
          </jurisdictionCodes>
          <mimeType>1</mimeType>
          <generationMethodType>9999</generationMethodType>
          <documentSupplier>Goldman Sachs</documentSupplier>
          <issuerIdentifiers>
            <issuerIdentifier schemeType="1">876543210</issuerIdentifier>
            <issuerIdentifier schemeType="2">888800ABCDEFGHIJKL00</issuerIdentifier>
          </issuerIdentifiers>
          <lastUpdateTimestamp>2019-05-30T19:43:43.000+02:00</lastUpdateTimestamp>
          <lastGenerationTimestamp>2019-05-21T10:41:14.000+02:00</lastGenerationTimestamp>
          <sourcingStrategyType>99</sourcingStrategyType>
        </document>
        <document>
          <documentID>abcdvdbpr9xx65fnfnw7jccfafzd8dep</documentID>
          < generalIdentifiers>
            <generalIdentifier schemeType="2">30750576</generalIdentifier>
            <generalIdentifier schemeType="1">DE000GL5N9U7</generalIdentifier>
            <generalIdentifier schemeType="3">GL5N9U</ generalIdentifier >
          </generalIdentifiers>
          <documentType>1</documentType>
          <languageCode>de</languageCode>
          <jurisdictionCodes>
            <jurisdictionCode>DE</jurisdictionCode>
          </jurisdictionCodes>
          <mimeType>1</mimeType>
          <generationMethodType>9999</generationMethodType>
          <documentSupplier>Goldman Sachs</documentSupplier>
          <issuerIdentifiers>
            <issuerIdentifier schemeType="1">876543210</issuerIdentifier>
            <issuerIdentifier schemeType="2">888800ABCDEFGHIJKL00</issuerIdentifier>
          </issuerIdentifiers>
          <lastUpdateTimestamp>2019-05-30T19:43:43.000+02:00</lastUpdateTimestamp>
          <lastGenerationTimestamp>2019-05-21T10:41:14.000+02:00</lastGenerationTimestamp>
          <sourcingStrategyType>99</sourcingStrategyType>
        </document>
      </documents>
      <statusCode>1</statusCode>
      <totalHits>52</totalHits>
    </ns3:searchDocumentResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

Figure 17: SOAP V3_1: Example of the response of the method searchDocument

4.2.7. Method getArchivedDocument

The method “getArchivedDocument” retrieves the copy of a particular requested document from the archive. Key is the “archiveID” which was returned with the original “getDocument” request. If the document is found, the document and metadata will be returned. If an error occurs, a SOAP fault will be returned. Getting a document from archive might take longer, especially when the document has been stored more than two years ago.

Supplied customData in the request is only visible in the audit log, since documents retrieved with this method are not archived.

Delivered storedCustomData is the customData supplied with the getDocument Request, which caused to document to be archived.

Request parameter	Mandatory
archiveID	Yes
customData1	No
customData2	No
customData3	No
customData4	No
customData5	No

Table 18: Request parameters getArchivedDocument

Response parameter	Mandatory
documentID	Yes
archiveID	Yes
timestamp	Yes
requestProcessingTimeExternal	Yes
requestProcessingTimeInternal	Yes
GeneralIdentifiers	Yes
documentType	Yes
languageCode	Yes
jurisdictionCodes	No
documentSupplier	No
issuerIdentifiers	No
generationMethodType	Yes
mimeType	Yes
document	Yes
storedCustomData1	No
storedCustomData2	No
storedCustomData3	No
storedCustomData4	No
storedCustomData5	No
statusCode	Yes

Table 19: Response parameters getArchivedDocument

Example SOAP Version V3_1:

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:v3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1/">
  <soapenv:Header />
  <soapenv:Body>
    <v3:getArchivedDocumentRequest>
      <archiveID>7d55ac5052388c86289561e91d5d3796-1643-1582713331</archiveID>
    </v3:getArchivedDocumentRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Figure 18: SOAP V3_1: Example of the request of the method getArchivedDocument

```
<?xml version="1.0" encoding="UTF-8"?>
```



```
<SOAP-ENV:Envelope
  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
  >
  <SOAP-ENV:Header />
  <SOAP-ENV:Body>
    <ns3:getArchivedDocumentResponse
      xmlns:ns3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1/"
      >
      <documentID>abcdsespfwmaa1ntp2suwppvc878kudwd</documentID>
      <archiveID>7d55ac5052388c86289561e91d5d3796-1643-1582713331</archiveID>
      <timestamp type="10">2020-02-26T11:35:31.000+01:00</timestamp>
      <requestProcessingTimeExternal>9000</requestProcessingTimeExternal>
      <requestProcessingTimeInternal>45</requestProcessingTimeInternal>
      <generalIdentifiers>
        <generalIdentifier schemeType="2">28460989</generalIdentifier>
        <generalIdentifier schemeType="1">DE000GL2NUG2</generalIdentifier>
        <generalIdentifier schemeType="3">GL2NUG</generalIdentifier>
      </generalIdentifiers>
      <documentType>1</documentType>
      <languageCode>de</languageCode>
      <jurisdictionCodes>
        <jurisdictionCode>AT</jurisdictionCode>
        <jurisdictionCode>CH</jurisdictionCode>
        <jurisdictionCode>DE</jurisdictionCode>
      </jurisdictionCodes>
      <documentSupplier>Goldman Sachs</documentSupplier>
      <issuerIdentifiers>
        <issuerIdentifier schemeType="1">876543210</issuerIdentifier>
        <issuerIdentifier schemeType="2">888800ABCDEFGHJKLM00</issuerIdentifier>
      </issuerIdentifiers>
      <generationMethodType>9999</generationMethodType>
      <mimeType>1</mimeType>
      <document>JVBERi0xL4Kc3RhcncR4cmVmCjg4NDY5CiUIRU9GCgo=</document>
      <statusCode>1</statusCode>
    </ns3:getArchivedDocumentResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Figure 19: SOAP V3_1: Example of the response of the method getArchivedDocument

4.2.8. Method searchArchivedDocument

The method “searchArchivedDocument” searches for documents in the archive matching the specified criteria. Matches are returned as a list with each element representing a document. Returned is the documents “archiveID”, its identifier and other metadata. The documents themselves are not part of the response. They need to be requested individually with the method “getArchivedDocument”. If no match is found, an empty list will be returned. To limit the amount of results, the limit parameter can be used (default limit is 100 entries). To request the next part of the results, the page parameter can be set (ex. result has 100 entries, but only show entries 11 to 20 one would set the page parameter to 2 and the limit parameter to 10). If an error occurs, a SOAP fault will be returned.

Request parameter	Mandatory
documentID	No (1)
generalIdentifier	No (1, 2)
documentType	No (1)
languageCode	No (1)
jurisdictionCode	No (1)
mimeType	No (1)
documentSupplier	No (1, 2)
issuerIdentifier	No (1, 2)

storedCustomData1 - 5	No (1)
listPage/ listLimit	No/ No

Table 20: Request parameters searchArchivedDocument

Response parameter	Mandatory
A List of:	
• archiveID	• Yes
• documentID	• Yes
• timestamp	• Yes
• generalIdentifiers	• Yes
• documentType	• Yes
• languageCode	• Yes
• jurisdictionCodes	• No
• mimeType	• Yes

• generationMethodType	• No
• documentSupplier	• No
• issuerIdentifiers	• No
• storedCustomData1 - 5	• No
statusCode	Yes
	Yes

totalHits

Table 21: Response parameters searchArchivedDocument

1. Searches can be performed only by the parameters that are marked with the **number 1**. At least one parameter must be provided.
2. The flagged parameters with the **number 2** are string fields. This kind of field gives the opportunity to search substrings (for more details see chapter 4.1.5 Use of search in API)

Example SOAP Version V3_1:

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:v3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1/">
  <soapenv:Header />
  <soapenv:Body>
    <v3:searchArchivedDocumentRequest>
      <documentID>abcdsespfwmaa1ntp2suwpcv878kudwd</documentID>
      <generalIdentifier schemeType="1">DE000GL3L</generalIdentifier>
      <documentType>1</documentType>
      <languageCode>de</languageCode>
      <jurisdictionCode>DE</jurisdictionCode>
      <storedCustomData1>Example</storedCustomData1>
      <storedCustomData2>Department</storedCustomData2>
    </v3:searchArchivedDocumentRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Figure 20: SOAP V3_1: Example of the response of the method searchArchivedDocument

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header />
  <SOAP-ENV:Body>
    <ns3:searchArchivedDocumentResponse
      xmlns:ns3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1/">
      <documents>
        <document>
          <archiveID>7d55ac5052388c86289561e91d5d3796-1643-1582713331</archiveID>
          <documentID>abcdsespfwmaa1ntp2suwpcv878kudwd</documentID>
          <timestamp type="10">2020-02-26T11:35:31.000+01:00</timestamp>
          <generalIdentifiers>
            <generalIdentifier schemeType="2">28860923</generalIdentifier>
            <generalIdentifier schemeType="1">DE000GL3L1Q6</generalIdentifier>
            <generalIdentifier schemeType="3">GL3L1Q</generalIdentifier>
          </generalIdentifiers>
          <documentType>1</documentType>
          <languageCode>de</languageCode>
          <jurisdictionCodes>
            <jurisdictionCode>DE</jurisdictionCode>
          </jurisdictionCodes>
          <mimeType>1</mimeType>
          <generationMethodType>9999</generationMethodType>
          <documentSupplier>Goldman Sachs</documentSupplier>
          <issuerIdentifiers>
            <issuerIdentifier schemeType="1">876543210</issuerIdentifier>
            <issuerIdentifier schemeType="2">888800ABCDEFGHJKLM00</issuerIdentifier>
          </issuerIdentifiers>
        </document>
      </documents>
    </ns3:searchArchivedDocumentResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

```

<storedCustomData1>Example</storedCustomData1>
<storedCustomData2>Department 123</storedCustomData2>
<storedCustomData3>Germany</storedCustomData3>
</document>
<document>
<archiveID>7d55ac5052388c86289561e91d5d3796-1643-1582713329</archiveID>
<documentID>abcdsespfwmaa1ntp2suwpsc878kudwd</documentID>
<timestamp type="10">2020-02-26T11:35:29.000+01:00</timestamp>
<generalIdentifiers>
  <generalIdentifier schemeType="2">28860923</generalIdentifier>
  <generalIdentifier schemeType="1">DE000GL3L1Q6</generalIdentifier>
  <generalIdentifier schemeType="3">GL3L1Q</generalIdentifier>
</generalIdentifiers>
<documentType>1</documentType>
<languageCode>de</languageCode>
<jurisdictionCodess>
  <jurisdictionCode>DE</jurisdictionCode>
</jurisdictionCodes>
<mimeType>1</mimeType>
<generationMethodType>9999</generationMethodType>
<documentSupplier>Goldman Sachs</documentSupplier>
<issuerIdentifiers>
  <issuerIdentifier schemeType="1">876543210</issuerIdentifier>
  <issuerIdentifier schemeType="2">888800ABCDEFGHJKLM00</issuerIdentifier>
</issuerIdentifiers>
<storedCustomData1>Example</storedCustomData1>
<storedCustomData2>Department 1</storedCustomData2>
</document>
</documents>
<statusCode>1</statusCode>
<totalHits>2</totalHits>
</ns3:searchArchivedDocumentResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
    
```

Figure 21: SOAP V3_1: Example of the response of the method searchArchivedDocument

4.2.9. Method getSIXStatusInformation

The method “getSIXStatusInformation” can be used to retrieve status information about an instrument. Be aware that only ISIN or valor number is supported as scheme type. Other values will not deliver results.

Request parameter	Mandatory
generalIdentifier	Yes

Table 22: Request parameters getSIXStatusInformation

Response parameter	Mandatory
instrumentStatus	Yes
delDate	No
pripScopeIndicator	Yes
fidlegScopeIndicator	Yes
sixSecurityType	Yes
fidlegProspectusRelevancy	Yes
fidlegProspectusApprovalDate	No

Table 23: Response parameters getSIXStatusInformation

Example SOAP Version V3_1:

```
<?xml version="1.0" encoding="UTF-8"?>
<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:v3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1/">
  <soapenv:Header />
  <soapenv:Body>
    <v3:getSIXStatusInformationRequest>
      <generalIdentifier schemeType="1">IT0005335952</generalIdentifier>
    </v3:getSIXStatusInformationRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Figure 22: SOAP V3_1: Example of the request of the method getSIXStatusInformation

```
<?xml version="1.0" encoding="UTF-8"?>
<SOAP-ENV:Envelope
  xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header />
  <SOAP-ENV:Body>
    <ns3:getSIXStatusInformationResponse
      xmlns:ns3="https://www.six-dochub.com/SIXDocHub/WebServices/SOAP/V3_1/">
      <instrumentStatus>4</instrumentStatus>
      <delDate>2020-08-31</delDate>
      <priipScopeIndicator>1</priipScopeIndicator>
      <fidlegScopeIndicator>0</fidlegScopeIndicator>
      <sixSecurityType>0</sixSecurityType>
      <fidlegProspectusRelevancy>0</fidlegProspectusRelevancy>
    </ns3:getSIXStatusInformationResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Figure 23: SOAP V3_1: Example of the response of the method getSIXStatusInformation

5. General API information

5.1. General type definitions

These definitions have been moved to document DocHub Attribute Tables.pdf
It is available at DocHub Member area and Documentation Center.

5.1.1. General Scheme Type

This table has been moved to document DocHub Attribute Tables.pdf

5.1.2. Contract Side Type

This table has been moved to document DocHub Attribute Tables.pdf

5.1.3. Document Type

This table has been moved to document DocHub Attribute Tables.pdf

5.1.4. MIME Type

This table has been moved to document DocHub Attribute Tables.pdf

5.1.5. Generation Method Type

This table has been moved to document DocHub Attribute Tables.pdf

5.1.6. Institution Scheme Type

This table has been moved to document DocHub Attribute Tables.pdf

5.1.7. Publication Classification Type

This table has been moved to document DocHub Attribute Tables.pdf

5.1.8. Sourcing Strategy Type

This table has been moved to document DocHub Attribute Tables.pdf

5.2. Web service: Type definitions

Type Name	Description
Timestamp Type	1 = Time of document generation of SIX DocGen 2 = Time of request from SIX DocHub to another 3rd Party Supplier 3 = Time of upload from 3rd Party Supplier to the SIX DocHub 10 = Time when a document was stored in to the archive. 9999 = Unknown

Table 24: Timestamp Type

5.3. Web service: Status Code

Status Code returns the application faults back in the form of error codes.

Name	Description
Status Code	1 = Success 210 = No result found 211 = The result was filtered and may be incomplete

Table 25: Status Code

5.4. Web service: SOAP fault

SOAP fault returns the technical faults back in the form of error codes.

Name	Description
SOAP fault	<p>100 = General error, see error message for details</p> <p>200 = Parameter is missing, see error message for details</p> <p>201 = Parameter value is invalid, see error message for details</p> <p>204 = Data type of parameter is wrong, see error message for details</p> <p>205 = General Scheme Type is unknown</p> <p>230 = No active connections available</p> <p>301 = Instrument is unknown</p> <p>302 = Document is not available</p> <p>305 = An error occurred while reading the document</p> <p>320 = The requested documentID is not available</p> <p>330 = Failed to retrieve document</p> <p>400 = Missing permission for request</p> <p>601 = Document generator failed to generate document, see error message for details</p> <p>602 = Parameter is missing for generating a document, see error message for details</p> <p>603 = Parameter value is invalid for generating a document, see error message for details</p> <p>604 = The document is not available on the document generator, see error message for details</p> <p>(Note: The 6xx error codes are only thrown by the methods 7 and 8.)</p> <p>1001 = Login failed, username or password is wrong</p> <p>1002 = Session ID is invalid</p> <p>1004 = The maximum number of connections is reached</p> <p>1005 = Invalid authorization token</p> <p>1006 = Too many requests</p>

Table 26: SOAP fault

5.5. Web service: Definition of the attribute type dateTime

The attribute type dateTime is structured as follows:

Format of timestamp	Description
yyyy-mm-ddThh:mm:ss.ssszzzzz	<p>yyyy = year</p> <p>- = separator between parts of the date portion</p> <p>mm = month</p> <p>- = separator between parts of the date portion</p> <p>dd = day</p> <p>T = Separator indicating that time-of-day follows</p> <p>hh = hours</p> <p>- = separator between parts of the time-of-day portion</p> <p>mm = minutes</p> <p>- = separator between parts of the time-of-day portion</p> <p>ss = seconds</p> <p>.= separator between seconds and fractional seconds</p> <p>sss= fractional seconds</p> <p>zzzzz = time zone regions with standard offset from UTC</p> <p>Examples: 2016-06-01T12:15:14.000+02:00 = 2016-06-01 12:15:14 +02:00 2016-06-15T16:45:01.000-08:00 = 2016-06-15 16:45:01 -08:00</p> <p>More details can be found at: http://www.w3.org/TR/xmlschema-2/ (#dateTime).</p>

Table 27: Format of the attribute type dateTime

5.6. Format of a timestamp attribute (not in Web service)

The format of a timestamp attribute is structured as follows:

Format of timestamp	Description
yyyyMMdd_HHmss_Szzzz	yyyy = year MM = month dd = day HH = hours mm = minutes ss = seconds S = sign zzzz = time zone regions with standard offset from UTC
Examples:	
20160601_121514_+0200 = 2016-06-01 12:15:14 +02:00	
20160615_164501_-0800 = 2016-06-15 16:45:01 -08:00	

Table 28: Format of a timestamp attribute

6. Implementation Support

6.1. Demo java application

A demo java application is available in the documentation center (Java 11 is required).
Following functions are implemented:

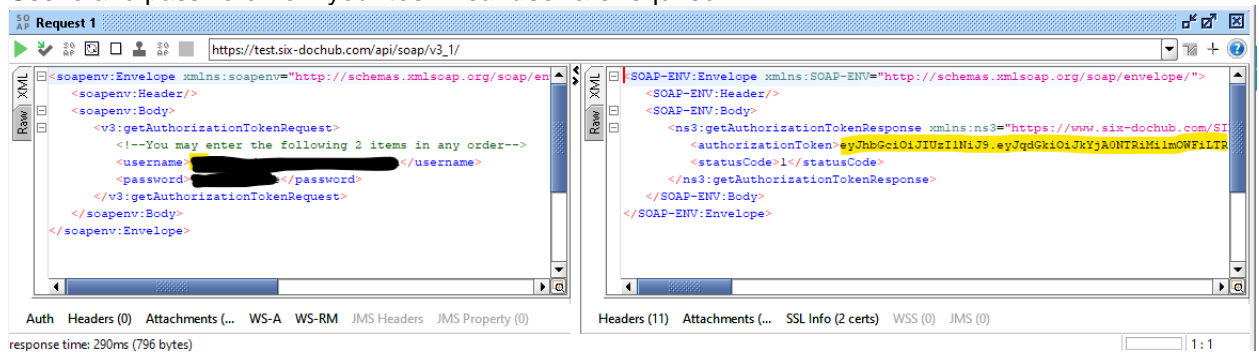
- Login
Please provide userid and password from your **technical** user. The user provided for GUI access is not entitled to use the API.
- Search
Search for documents using the token from Login.
- Download a document
Access DocHub and download a document using the token from Login.

6.2. Screenshot from SoapUI tool

The tool offers an easy access to Soap interfaces.

6.2.1. Screenshot Login

Usrid and password from your **technical user** are required.



See the returned token `eyJhbGciOiJIUzI1NiJ9.eyJqdGkiOiJkYjYjA0NTRiMi1mOWFiLTR...` which is used in the header of the search request below.

6.2.2. Screenshot Search

Please note the Authorization with the bearer value and the **token** delivered by login.

The screenshot shows a SOAP API client interface with two panels: Request and Response. The Request panel shows a SOAP envelope with a `v3:searchDocumentRequest` body. The Response panel shows a SOAP envelope with a `ns3:searchDocumentResponse` body containing a list of documents with various identifiers and metadata. A table below the request shows the Authorization header value.

Header	Value
Authorization	Header eyJhbGciOiJIUzI1NiIsInR5cCI6Ikp1bnQ6IjYyYjA0...

Auth Headers (1) Attachments (... WS-A WS-RM JMS Headers JMS Property (0)
response time: 120ms (1256 bytes)

Headers (11) Attachments (... SSL Info (2 certs) WSS (0) JMS (0) 1:1