



**EDOCS Auto Docketing
Functional Requirements Document for
Conducting Electronic File Transfer
Phase I**

Version 1.0

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03/13/2012	V1.0	Initial Version – 1 st Iteration

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Abbreviations/Acronyms

Name, Acronym, or Abbreviation	Definition
API	Application Programmer Interface
ECFS	Electronic Filing Comment System
EDOCS	Electronic Document Management System
HTTP	Hypertext Transfer Protocol
XML	eXtensible Markup Language

Preface**Purpose**

The purpose of this document is to define and prioritize the detailed requirements for the EDOCS Auto Docketing project, PHASE I.

Audience

This document has the following intended audience:

- Team members within the EDOCS and ECFS Technical Support, Business, and Operations areas.

Amendments

Amendments to this document are issued as needed. If you would like to suggest an amendment, please send an email to the document owner identified above.

Approved By:

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AUTOMATED DATA TRANSFER

1.0 PURPOSE

The goal of the Automated Data Transfer Initiative is to allow for an automated transfer of released data and documents from EDOCS to ECFS. The Application Programming Interfaces (API) will be developed for XML Databases. To provide a wide usability the API must be specified as vendor-neutral.

The API will transfer information to ECFS after the new docket and rule making number is automatically generated and assigned in EDOCS, the metadata is completed, and released. There will be a lack time (2-3 days) between the documents are pushed to assigned docket numbers in ECFS.

2.0 REQUIREMENTS

The following key words are used throughout the document to specify the extent to which an item is a requirement for the work of the *XML Auto Docketing* API Working Group:

MUST - This word means that the item is an absolute requirement.

SHOULD - This word means that there may exist valid reasons not to treat this item as a requirement, but the full implications should be understood and the case carefully weighed before discarding this item.

MAY - This word means that an item deserves attention, but further study is needed to determine whether the item should be treated as a requirement.

2.1 General Requirements

- Language Independence - The API **MUST NOT** preclude the usage with more than one language binding.
- Textual Interface - The API **MUST** provide a textual representation of XML result sets.
- Request is an HTTP POST request with “multipart/form-data” encoding.
 - Relative URL- a string containing the URL to which the request is sent.
 - All parameters are strings.
 - Response is an XML file with an HTTP status code 200 indicating a successful filing and HTTP status code 400 indicating an error.

2.2 Detailed Requirements

2.2.1 API Direction- the **API MUST** be unidirectional and **MUST** provide the data flow only from EDOCS to ECFS.

2.2.2 Retrieval- the **API MUST** provide the ability to retrieve the data and documents from the EDOCS database. The data and documents **MUST** be identified by a unique ID- Docket Number/RM Number.

2.2.3 Insertion - The **API MUST** be able to store new data and documents into the ECFS database. The data and documents **MUST** be identified by unique Docket Number/RM Number.

2.2.4 Deletion - The **API MUST NOT** be able to delete data and documents from EDOCS Database.

2.2.5 Update - The **API MUST** provide the ability to update the data and documents in ECFS database. The data and document **MUST** be identified by a unique ID- Docket Number/RM Number.

2.2.6 Start of the Electronic Transfer. Once the new docket and rule making number is automatically generated and assigned in EDOCS, the above data fields will be hold in EDOCS and will be transferred to ECFS only after the files are released to the public.

2.2.7 Ability to set delays for electronic transfer. EDOCS Administrative Users must have the ability to delay an automated transfer of data and documents from EDOCS to ECFS for a set duration (ex. 1, 2, 3, ... days). Administrative users must be able to specify the duration to delay automated transfer of data and document to ECFS, without requiring code changes.

2.2.8 Ability to transfer files manually. EDOCS administrative users must have the ability to manually transfer documents to ECFS without waiting for automated transfer.

Data elements/fields:

Parameter in ECFS	Parameter in EDOCS	Data Field Name	Type	Size
Proceedings/proceeding_name	Proceedings/PROCEEDING	Docket / RM Number	Varchar	35
Submission/delegated_authority_number	Document/DA_NO	DA Number	Varchar	30
Submission/delegated_authority_number	Document/FCC_NO	FCC Number	Varchar	30
Proceedings/id_bureau	Proceedings/Bureau	Bureau/Office	Varchar	255
Proceedings/bureau_id_num AND Submission/bureau_id_num Please note. The Bureau ID number must transfer to both tables.	Bureau_ID	Bureau Identification Number	smallint	
Proceeding/applicant	Not Existent Need to create new column "Prepared_By"	Prepared By	Varchar	30
Submission/author_name	Not Existent Need to create new column "Author"	Author	Varchar	30
Document/Description Or Proceeding/Subject Please note. This still needs to get verified by users.	shortTitle	Short Title	Varchar	110
Not Existent New field to be added to ECFS	title	Official Title	Varchar	250
Proceedings/File_number AND Submission/file_number Please note. The File number	Document/File_NO	File Number	Varchar	255

must transfer to both tables.				
Proceedings/ date_proceeding_created Please note. This field needs to display the date the proceeding was release by EDOCS	Not Needed	Date Proceeding Opened	datetime	
Submission/viewing_status Submission/ id_submission_status	Not Needed	Viewing Status / Confidential Indicator		
Proceeding/ Flag_small_business_impact	Not Existent New field to be added to EDOCS	Small Business Indicator		
Document/ID_File_Type	Document/Document_Type_ID	Document Type	smallint	
Not Existent New field to be added to ECFS	Document/Report_NO	Report Number	Varchar	20
Proceeding/Date_Effective	Document/Date_Effective	Effective Date	datetime	
Not Existent New field to be added to ECFS or map to Submission/Applicant_Name??? Please note. This still needs to get verified by users.	Document/Authority	Authority	Varchar	255
Submission/Date_Filed	Document/Date_Adopted	Date Adopted	datetime	
Submission/Date_Released	Document/Date_Released	Date Released	datetime	
Not Existent New field to be added to ECFS	Document/Date_Comment	Date Comment Period Please note. This field has no “open” or “close” status.	smalldatetime	
Not Existent New field to be added to ECFS	Document/ Date_Reply_Comment	Date Reply Comment Period Please note. This field has no “open” or “close” status.	smalldatetime	

<p>Not Existent New fields to be added to ECFS</p>	<p>Federal_Register_LK/ Federal_Register_ID Federal_Register_Volume Federal_Register_Page Federal_Register_Date</p>	<p>Federal Register Citation</p>	<p>int</p>	
<p>Not Existent New fields to be added to ECFS</p>	<p>Document/ FCCRec_page FCCRec_issue FCCRec_vol</p>	<p>FCC Record Citation</p>	<p>int</p>	

2.3 Successful Electronic Transfer

In the event when a successful submission is received, the API will return XML result indicating that a filing has been received with a status equal “OK.”

2.3.1 Response to successful transfer

2.3.1.1 Response will be in XML format with HTTP status code 200

2.3.1.2 Response will include the confirmation number of the successful filing

Example

```
<response status="OK">  
<confirmation>856123612421</confirmation>
```

2.4 Failed Electronic Transfer

In the event when an incomplete submission is received, the API will return XML result indicating that a filing has been received with a status equal “FAIL.”

2.4.1 Response to failed transfer

2.4.1.1 Response will be in XML format with HTTP status code 400

2.4.1.3 It is assumed that all stream-level errors are unrecoverable; therefore, if an error occurs at the level of the stream, the entity that detects the error **MUST** send a stream error to the other entity, send a closing </stream> tag, and terminate the underlying TCP connection.

2.4.1.4 If the error occurs while the stream is being set up, the receiving entity **MUST** still send the opening <stream> tag, include the <error/> element as a child of the stream element, send the closing </stream> tag, and terminate the underlying TCP connection.

Example

```
<stream:error>
```

2.4.1.5 The `<text/>` element is **OPTIONAL**. If included, it **SHOULD** be used only to provide descriptive or diagnostic information that supplements the meaning of a defined condition or application-specific condition. It **SHOULD NOT** be interpreted programmatically by an application. It **SHOULD NOT** be used as the error message presented to a user, but **MAY** be shown in addition to the error message associated with the included condition element (or elements). Please refer to **Appendix A** for complete list of defined stream-level error conditions of the `<text/>`

Example

```
<stream:error>
  <xml-not-well-formed
    xmlns='urn:ietf:params:xml:ns:xmpp-streams'/>
  <text xml:lang='en' xmlns='urn:ietf:params:xml:ns:xmpp-streams'>
    Some special application diagnostic information!
  </text>
  <escape-your-data xmlns='application-ns'/>
</stream:error>
</stream:stream>
```

2.5 XML Data Flow

The steps required to support the import of an XML file to ECFS are as follows:

2.5.1 Schema Validations

2.5.1.1 Perform schema validations against ECFS schema. Schema validations include data point label correctness, container hierarchy, tag placement, data types and enumerations according to the ECFS schema. Any errors at this level stop the validation process; no data is stored.

2.5.2 XML File Validation

2.5.1.2 An XML import file shall be subject to file validations.

3.0 DATABASE CHANGES

3.1 EDOCS Database Changes

Following fields need to be added in EDOCS database Schema.

Field name	Corresponding Data point name	Type	Size
Prepared By		Varchar	30
Author		Varchar	30
Small Business Indicator		Char	1

3.1 ECFS Database Changes

Following fields need to be added in ECFS database Schema.

Field name	Corresponding Data point name	Type	Size
Official Title		Varchar	250
Report Number		Varchar	20
Authority		Varchar	255
Date Comment Period		smalldatetime	
Date Reply Comment Period		Smalldatetime	
Federal Register Citation	Four new columns corresponding to Federal Register (ID; Volume; Page; Date)	int	
FCC Record Citation	Three new columns corresponding to FCC Record Citation (Page; Issue; Vol)	int	

The size of the following existing fields in ECFS database Schema needs to get increased

Data point name	Type	Current Size	Increase to
Proceedings/ Proceeding_Name	Varchar	10	35
Proceedings/id_bureau	Smallint		Varchar 255
Submission/file_number	Varchar	20	255

APPENDICES

APPENDIX A – DEFINED STREAM-LEVEL ERROR CONDITIONS OF THE <TEXT/>

<text/> name	Corresponding Data point name
<bad-format/>	the entity has sent XML that cannot be processed; this error MAY be used instead of the more specific XML-related errors, such as <bad-namespace-prefix/>, <invalid-xml/>, <restricted-xml/>, <unsupported-encoding/>, and <xml-not-well-formed/>.
<bad-namespace-prefix/>	the entity has sent a namespace prefix that is unsupported, or has sent no namespace prefix on an element that requires such a prefix
<conflict/>	the server is closing the active stream for this entity because a new stream has been initiated that conflicts with the existing stream
<connection-timeout/>	the entity has not generated any traffic over the stream for some period of time
<host-gone/>	the value of the 'to' attribute provided by the initiating entity in the stream header corresponds to a hostname that is no longer hosted by the server
<host-unknown/>	the value of the 'to' attribute provided by the initiating entity in the stream header does not correspond to a hostname that is hosted by the server
<improper-addressing/>	a stanza sent between two servers lacks a 'to' or 'from' attribute
<internal-server-error/>	the server has experienced a misconfiguration or an otherwise-undefined internal error that prevents it from servicing the stream
<invalid-from/>	the JID or hostname provided in a 'from' address does not match an authorized JID or validated domain negotiated between servers via SASL or dialback, or between a client and a server via authentication and resource binding
<invalid-id/>	the stream ID or dialback ID is invalid or does not match an ID previously provided
<invalid-xml/>	the entity has sent invalid XML over the stream to a server that performs validation
<not-authorized/>	the entity has attempted to send data before the stream has been authenticated, or otherwise is not authorized to perform an action related to stream negotiation; the receiving entity MUST NOT process the offending stanza before sending the stream error
<policy-violation/>	the entity has violated some local service policy; the server MAY choose to specify the policy in the <text/> element or an

<text/> name	Corresponding Data point name
	application-specific condition element
<remote-connection-failed/>	the server is unable to properly connect to a remote entity that is required for authentication or authorization
<resource-constraint/>	the server lacks the system resources necessary to service the stream
<restricted-xml/>	the entity has attempted to send restricted XML features such as a comment, processing instruction, DTD, entity reference, or unescaped character
<system-shutdown/>	the server is being shut down and all active streams are being closed
<undefined-condition/>	the error condition is not one of those defined by the other conditions in this list; this error condition SHOULD be used only in conjunction with an application-specific condition
<unsupported-encoding/>	the initiating entity has encoded the stream in an encoding that is not supported by the server
<unsupported-stanza-type/>	the initiating entity has sent a first-level child of the stream that is not supported by the server
<xml-not-well-formed/>	the initiating entity has sent XML that is not well-formed as defined by [XML]

APPENDIX B – VALID VALUES FOR PARAMETER “BUREAU”

Value	Definition
AU	Auctions
CS	Cable Services Bureau
CC	Common Carrier Bureau
CI	Compliance and Information Bureau
CG	Consumer and Government Affairs Bureau
EB	Enforcement Bureau
FO	Field Operations Bureau
GN	General (Multiple Bureaus)
IB	International Bureau
MM	Mass Media Bureau
MB	Media Bureau
BO	Office of Communication Business Opps
CB	Office of Communications and Business Op
ET	Office of Engineering and Technology
CG	Office of General Counsel
IC	Office of International Communications
OL	Office of Legislative Affairs
MD	Office of Managing Director
PP	Office of Plans and Policy
XX	Others

Value	Definition
PR	Private Radio Bureau
PS	Public Safety and Homeland Security
WP	Wireless Telecom and Public Safety
WT	Wireless Telecommunications Bureau
WC	Wireline Competition Bureau

Value	Definition

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APPENDIX D – VALID VALUES FOR FILETYPE PARAMETERS

Value	Definition
<i>doc</i>	<i>Microsoft Word</i>
<i>wpd</i>	<i>WordPerfect</i>
<i>xls</i>	<i>Microsoft Excel</i>
<i>pdf</i>	<i>Adobe Acrobat PDF</i>
<i>txt</i>	<i>ASCII Text</i>
<i>wks</i>	<i>Lotus 123</i>
<i>ppt</i>	<i>PowerPoint</i>