

ECTD v4.0 Implementation Update

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Learning Objectives

- Understand fundamental eCTD v4.0 concepts
- Discuss FDA eCTD v4.0 implementation strategy
- Prepare for eCTD v4.0

eCTD v4.0 Goals



- The goal of upgrading to eCTD v4.0 is to facilitate the processing and review of electronic regulatory submissions.....key business drivers:
 - ⊖ Document Reuse – ability to submit a document once to a Regulatory Authority and refer to the document by its unique identifier in future submissions
 - ⊖ Document and Metadata life cycle – ability to manage versions of documents and/or metadata (e.g., update document title, manufacture, study title,)
 - ⊖ Management of Context Groups – ability to group documents together based on nature of their use (e.g., components of clinical study reports)

eCTD v4.0 Concepts

Harmonized Submission Unit



All content from Module 1 through Module 5 contained in one exchange message

eCTD v4.0	eCTD v3.2.2
Submissionunit.xml (M1-M5 and study data information)	Usregional.xml (M1) Index.xml (M2-M5) Stf.xml (Studies)

Document Reuse



- Once a document has been submitted, the document may be reused by referencing its unique identifier (ID) from the same or different submission unit (sequence).
- Allows reuse of meta-data (e.g., document title, location)

Context of Use (COU)

- Placement of a document within a TOC* heading/section
- Provides information regarding the usage of a document and its life cycle (e.g., content may be replaced)
- **Keyword** gives additional information to the **CoU**
 - ⊕ Keywords replace the eCTD v3.2.2 attributes and valid values
- Example:

COU X

3.2.S.2 Manufacture (name 1, manufacturer 1)

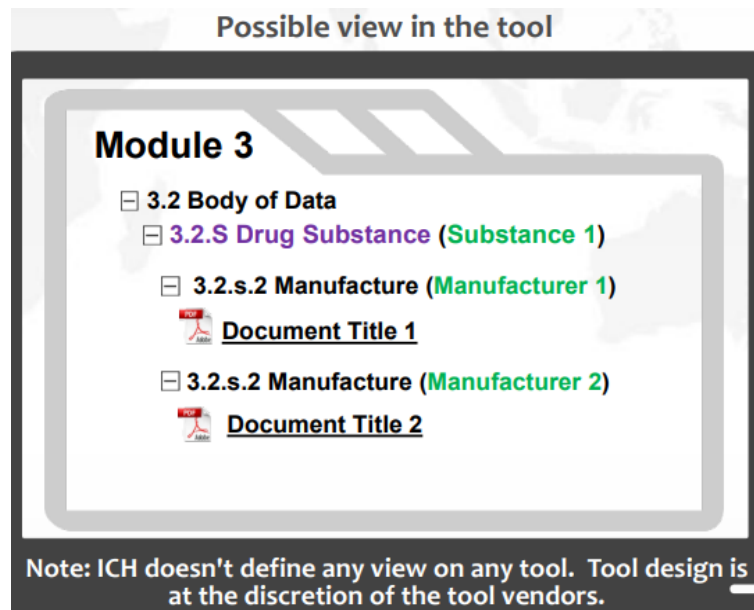
COU and Keyword Combinations (Context Group)



The combination of **CoU** and **keyword(s)** defines the context of the submission contents. If any one of them is different, the context is considered different.

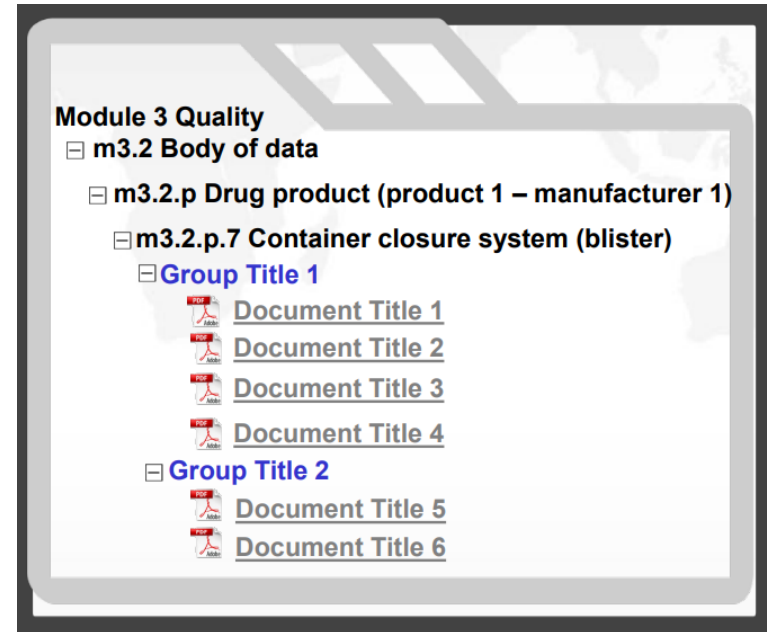
COU X
3.2.S.2 Manufacture
Substance 1 manufacturer 1

COU Y
3.2.S.2 Manufacture
Substance 1 manufacturer 2



Group Title

- Uses Group Title Keyword
- Applied to lowest level of Context of Use or Context Group to further organize content under a CTD heading when multiple documents are allowed
- The sender assigns the group title to specify how the content should appear together

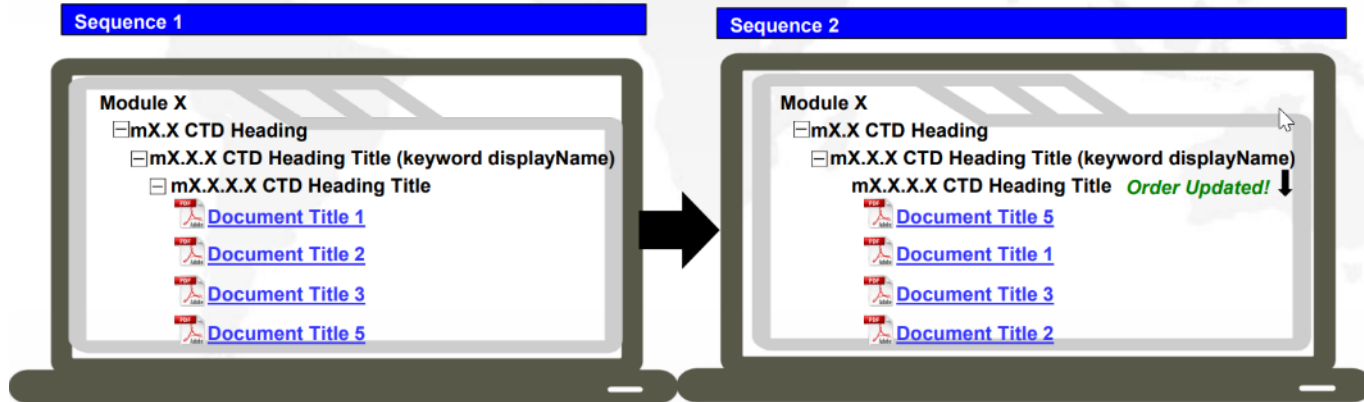


Priority Number

Sets the order of documents within a CTD section

- Explicitly defines display order of documents under a Context of Use (CoU) or Context Group
- Sender may reorder submission content or insert submission content into a specific order within the existing content over time

Possible views on the tool



Document Identifier



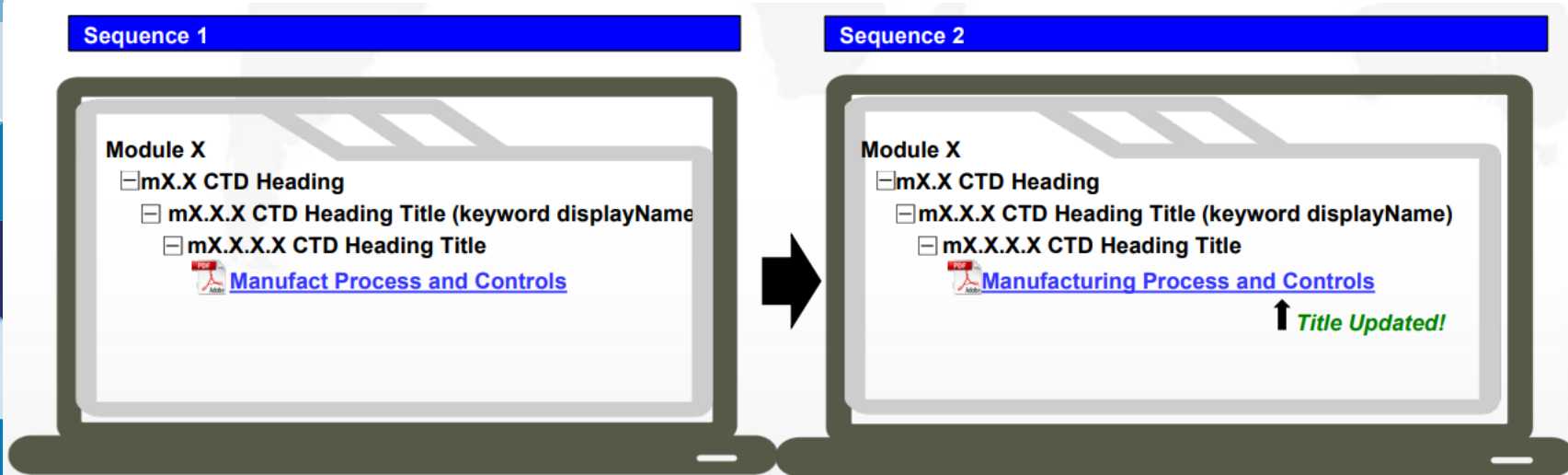
Every document assigned a unique identifier

- Unique identifier approach means documents can be referenced/reused more effectively without resubmitting the physical file
 - ⊖ Across a Submission Unit (sequence)
 - ⊖ Across regulatory activities with an application
 - ⊖ Across different applications
- Used to reference the document in a context of use or context group
- Reuse document metadata (e.g., document title, location)

Update Document Information

Update document title

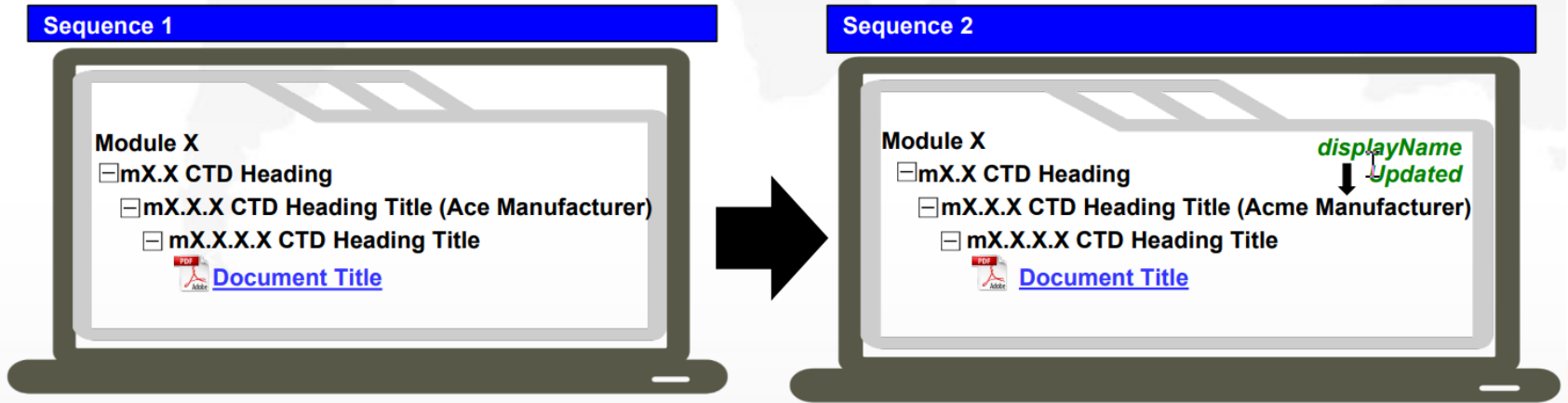
⇒ e.g., fix typo



Note: ICH doesn't define any view on any tool. Tool's design is at the discretion of the tool vendors.

Update Display Name Values

Update display name values in eCTD headings without need to life cycle content

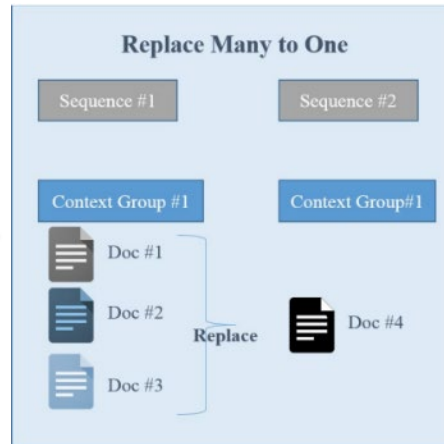


Document Life cycle

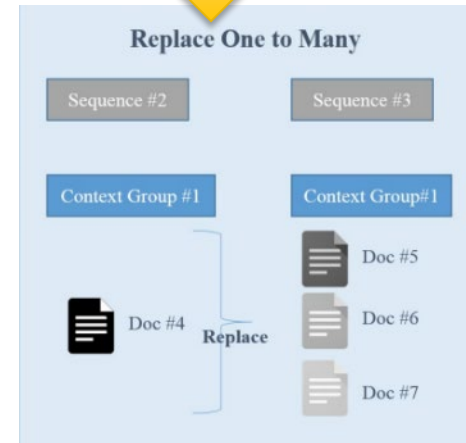
- Document Life cycle

- ⊙ Replace:
 - ⊙ One to One
 - ⊙ Many to One
 - ⊙ One to Many

Applicant is submitting a document in sequence #2 that is replacing 3 documents previously submitted in sequence #1



Applicant is submitting 3 documents in sequence #3 that are replacing a single document previously submitted in sequence #2



Challenge Question #1

An eCTD v4.0 sequence contains a harmonized submission unit message called submissionunit.xml

- A. True
- B. False

Challenge Question #2

eCTD v4.0 document life cycle functionality allows

- A. One to one
- B. One to many
- C. Many to one
- D. All of the above

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FDA eCTD v4.0 Implementation Strategy

ICH Activities



Keep an eye on this space.
ICH updates expected soon.



- ICH eCTD v4.0 Implementation Guide
 - ⊖ V1.6 May 2024
- ICH Code List for eCTD v4.0
 - ⊖ V1.6 May 2024
- Q&A Change Requests
 - ⊖ V1.8 May 2024
- Implementation Dates for Regulatory Authorities
- Join eCTD Tool Vendor Group
 - Sign up is now available on ICH page

ich.org/page/ich-electronic-common-technical-document-ectd-v40

Step 4 Implementation Package
To download the package, [click here](#).

This Implementation Package comprises multiple documents and files. Note that these documents need to be used in conjunction with the Regional/Module 1 documents provided on each of the regional consultation pages (see links below).

Document	File Name	Version Number
ICH eCTD v4.0 Implementation Package History	eCTD v4_0_Implementation_Package_History_v1_5.pdf	V1.5
ICH eCTD v4.0 Implementation Guide	ICH_eCTDv4_0_ImplementationGuide_v1_5.pdf	V1.5
ICH Code List for eCTD v4.0	ICH_eCTDv4_0_CVv5.xlsx	V5.0
M8 Genericode Schema and Files	Genericode	-
Schema Files for eCTD v4.0 Messaggio	ICH_eCTD_v4_SchemaFiles	-

FDA Activities



- eCTD v4.0 Technical Conformance Guide and FDA eCTD v4.0 Module 1 Implementation Package
 - ⊖ Published February 2020 for public comment
 - ⊖ Updates have been published after 2020
- Specifications for eCTD v4.0 Validation Criteria
- eCTD v4.0 Comprehensive Table of Contents Headings and Hierarchy
- Software updates and testing
 - ⊖ Testing eCTD v4.0 vendor software – in progress
 - ⊖ eCTD v4.0 Technical Pilot - completed



Keep an eye on this space.
FDA updates expected soon.



Electronic Common Technical Document (eCTD) v4.0

The documents and files referenced on this web page are: FOR IMPLEMENTATION PLANNING ONLY



The documentation and links on this webpage provide information on how to submit eCTD v4.0-based electronic submissions to the Center for Drug Evaluation and Research (CDER) or the Center for Biologics Evaluation and Research (CBER).

FDA eCTD v4.0 Implementation Status

CDER and CBER are in the process of testing our eCTD v4.0 software.

CDER and CBER plan to accept new applications in eCTD v4.0 format in 2024. Future implementation phases will address existing v3.2.2 applications and two-way communication.

UPDATE: CDER has posted eCTD v4.0 Implementation Package v5 that includes

FDA Implementation Strategy



- Initial release/support for new applications in eCTD v4.0
 - ⊖ Technical Pilot (completed)
 - ⊖ Small group
 - ⊖ Accept sample submissions for technical feedback
 - ⊖ Open to all (will start when FDA begins supporting v4.0)
 - ⊖ Begin support for new applications in eCTD v4.0 in 2024*
- Future phases
 - ⊖ Transition of current applications (Forward Compatibility)
 - ⊖ Two-way communication

*When FDA is ready to accept eCTD v4.0, the agency will update the FDA Data Standards Catalog to reflect the date support begins and publish a Federal Register Notice



How to Submit an eCTD v4.0 Sample



Home / Drugs / Development & Approval Process | Drugs / Forms & Submission Requirements / Electronic Regulatory Submission and Review / Submit an eCTD or Standardized Data Sample to the FDA

Submit an eCTD or Standardized Data Sample to the FDA

- Exists today for eCTD v3.2.2
 - Find information about it here: <https://www.fda.gov/drugs/electronic-regulatory-submission-and-review/submit-ectd-or-standardized-data-sample-fda>
- CDER plans to expand to include v4.0
 - Sample page will be updated when v4.0 is added to the FDA Data Standards Catalog
- FDA CDER eSub team performs technical validation on the sample submission and reports back on validation errors and other technical issues



eCTD v4.0 Webpages





- ICH eCTD v4.0 Webpage (<https://www.ich.org/page/ich-electronic-common-technical-document-ectd-v40>)
 - ⇒ ICH eCTD v4.0 Implementation Package
 - ⇒ Supplemental Documents for eCTD v4.0 Implementation Package
 - ⇒ Regional Implementation Information & Regional Links
 - ⇒ Change Control (Process, Change Request & Questions)
- FDA eCTD v4.0 Webpage (<https://www.fda.gov/drugs/electronic-regulatory-submission-and-review/electronic-common-technical-document-ectd-v40>)
 - ⇒ FDA eCTD v4.0 M1 Implementation Package
 - ⇒ eCTD v4.0 Technical Conformance Guide, CTOC, Validations
 - ⇒ Link to ICH eCTD v4.0 webpage



Prepare for eCTD v4.0

How to Prepare for eCTD v4.0

- Discuss eCTD v4.0 development plans with your vendor and/or IT organization
 - ⊖ Understanding the specifications
 - ⊖ Is there a plan for transitioning to eCTD v4.0?
 - ⊖ Send questions to ICH or FDA
- Become familiar with eCTD v4.0 concepts and enhancements
 - ⊖ ICH Supplemental Documents for eCTD v4.0
 - Support Documentation and Orientation Material for eCTD v4.0 Implementation Package
 - ⊖ FDA eCTD v4.0 Technical Conformance Guide 
- Know where to find the eCTD v4.0 information
- Submit an eCTD v4.0 sample submission for technical feedback
 - ⊖ Information will be posted on the eCTD Sample Submission Process webpage later this year (<https://www.fda.gov/drugs/electronic-regulatory-submission-and-review/submit-ectd-or-standardized-data-sample-fda>) 

Poll Question



My company plans to submit an eCTD v4.0 submission in:

- A. 2024
- B. 2025
- C. 2026
- D. I don't know

Summary



- eCTD v4.0 builds upon the success of v3.2.2
 - ⊖ Enhanced document replacement
 - ⊖ Harmonized submission unit (backbone) file
 - ⊖ Utilization of controlled vocabularies
 - ⊖ Ability to rename documents and context groups
- eCTD v4.0 is ready to implement
 - ⊖ Regulators are actively working on their regional implementations
- FDA has published regional specifications, completed pilot testing; Current plan to support new applications in eCTD v4.0 submissions this year
- FDA eCTD website (www.fda.gov/ectd) contains all regional eCTD v4.0 specifications and links to ICH specifications