

Introduction to EDMS



What is EDMS?

EDMS - Engineering Data Management System

 EDMS is a computerized tool that is used to store, organize and control all engineering data throughout the design, manufacturing and maintenance phases.

Also called:

- PDM Product Data Management Systems
- PLM Product Lifecycle Management
- TIS Technical Information Systems etc..



Main Features in EDMS

- Document management
- Approval procedures
- Versioning handling
- Change control and log of all activities
- Managing various structures
- Configuration management
- Asset tracking (MTF/Infor EAM)

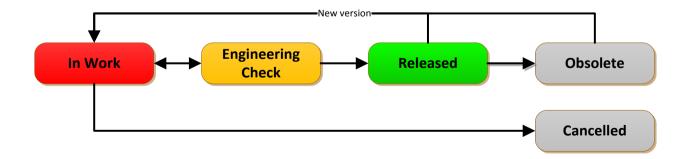
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Maintenance management (MTF/Infor EAM)



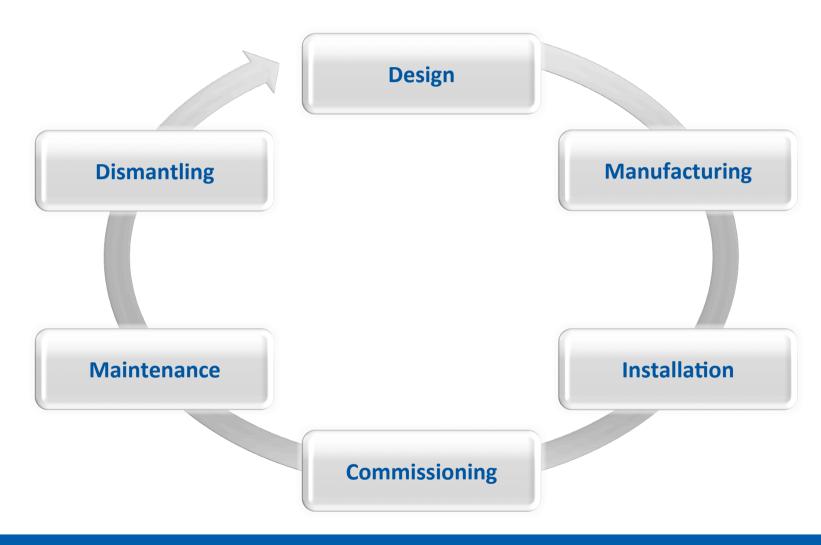
Approved

Nov. 2nd 2005 Smith





Product lifecycle and EDMS







Basic Concepts



Accessing EDMS

- Directly
 - https://www.cern.ch/edms
 - edms.cern.ch
- Through the CERN Directory
 - https://www.cern.ch/directory/











News

May 25, 2014

Latest Features Added to EDMS 6

Plotting from the Caddie is now available Sharing Read Access through the Caddie is now available

April 14, 2014

EDMS database upgrade EDMS will be **unavailable** today (April 14th) between 18h00 and 24h00 due to a database upgrade operation

April 3, 2014

Introduction presentation of EDMS6 -

EDMS just got better than ever! Dates:

- 8th April 2014 09:00-10:00 (30-7-018 Kjell Johnsen Auditorium)
- 10th April 2014 14:00-15:00 (864-1-D02 -BE Auditorium Prevessin)

March 25, 2014

EDMS uses Single Sign On

March 20, 2014

Possibility to show or hide documents in the structure

February 25, 2014

Other applications CDD MTF Infor EAM Other information News Account
Request an EDMS account
Forgot password?
Local administrators

Support & Training
Help

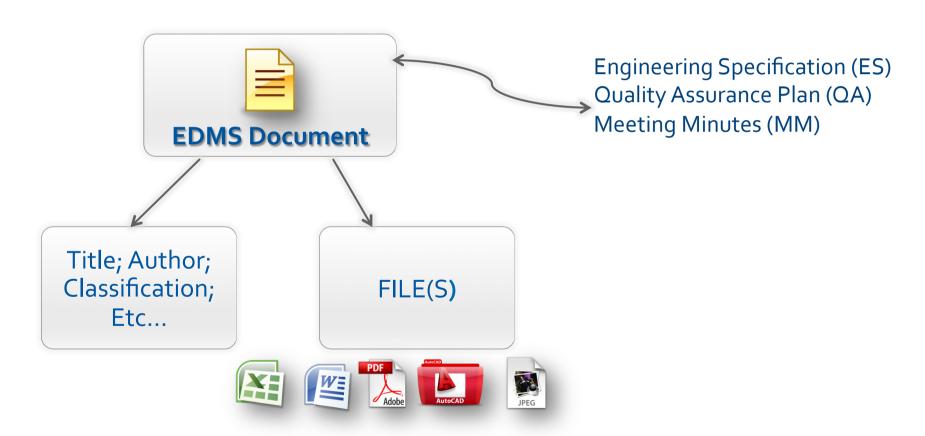
Help EDMS training Support pages





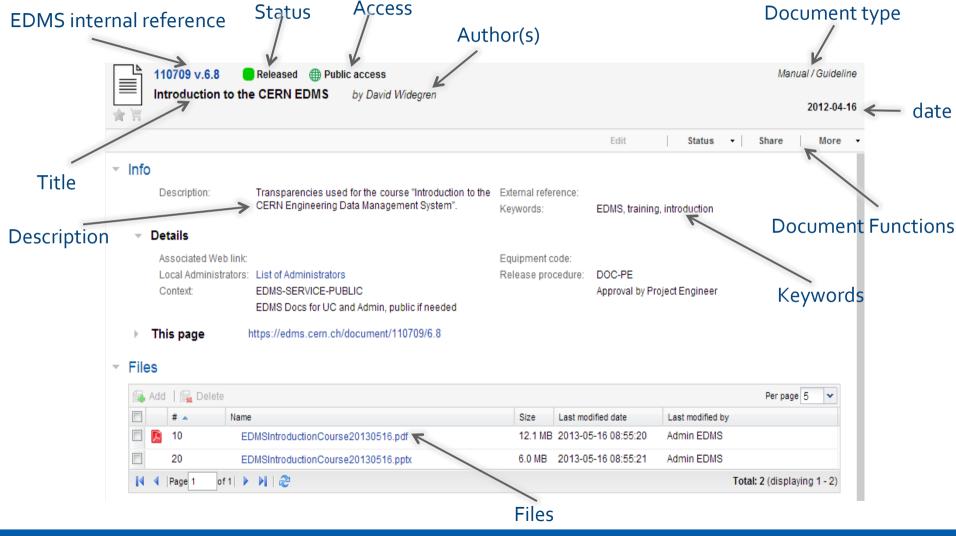
What is a document?

A document in EDMS consists of two main parts:





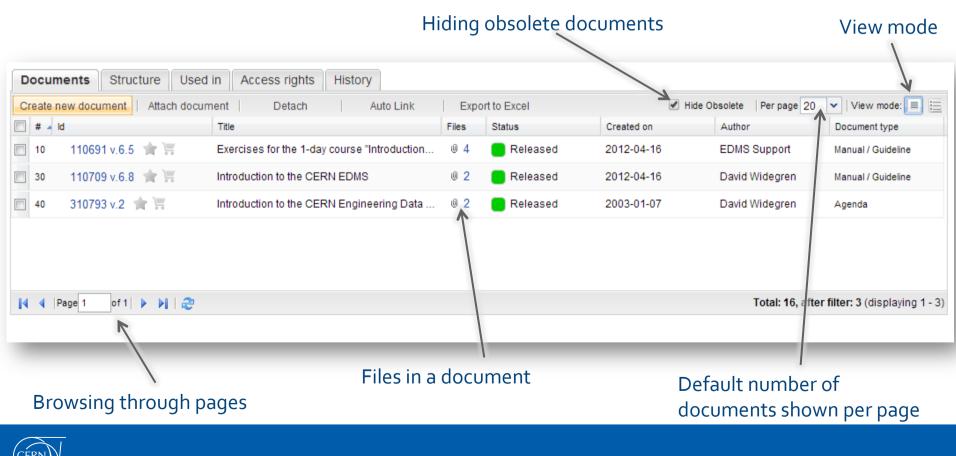
A Document in EDMS





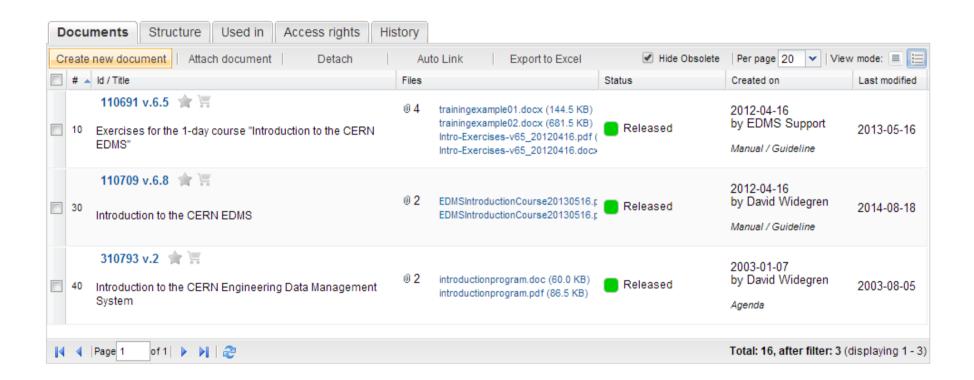
Documents in EDMS

There are different document views in EDMS



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Documents in EDMS





General recommendations

- Only files describing the same contents should be put into the same document.
- Always put the native file format + a viewable/printable file format into the document. (Using the same file name for these.)





Searching for documents

EDMS uses a Google-like search throughout the entire system

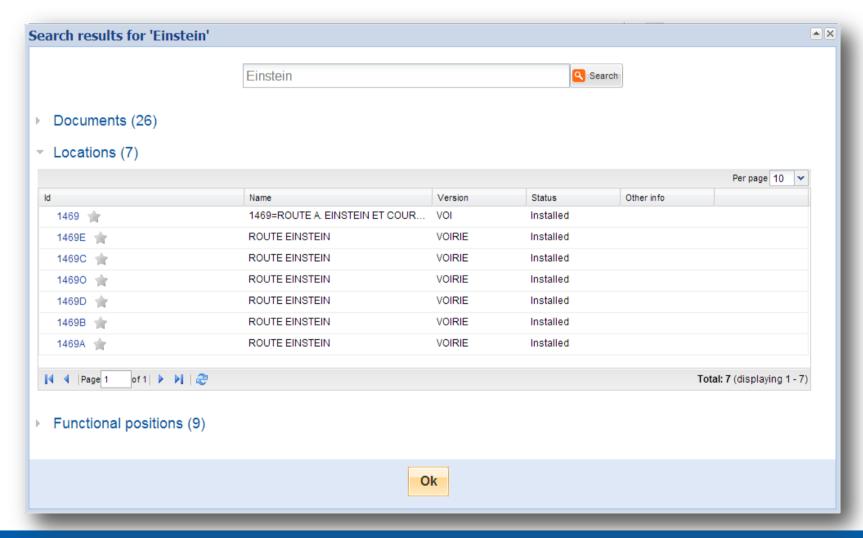
Every field in the document is searched (Author, EDMS ID, External Reference, Keywords, Description, Title, etc..)







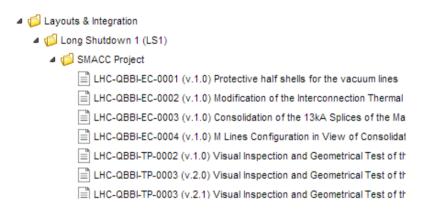
Searching in EDMS





Structuring the information

These structure objects (nodes, folders) are called projects in EDMS



- When the amount of data grows it is convenient to structure the documents. This has several advantages:
 - Easier to find documents. (Structure + document meta data gives lots of search possibilities.)
 - Possible to group documents that are logically linked. (For example to collect all documentation concerning a <u>certain project or a group's activities</u>.)



Official project structures

 Most EDMS user communities at CERN have some official project structures to which all official and important documents should be

<u></u> [...]

LHCb Experiment

▶ □ LHCb Baseline Detector
 ■ □ LHCb Experiment Upgrade

▶ iii Infrastructure

Calorimeters

Data Handling

Uertex Locator
 Outer Tracker

Trigger Tracker

Commissionning

├ Inner Tracker
 ├ Central Tracker
 ├ Torch
 ├ Muon System
 ├ Online

▶ iii Trigger

Offline

▷ I RICH Detectors

Technical Coordination

Resource Coordination

■ Gommon Electronics

LHCb Readout

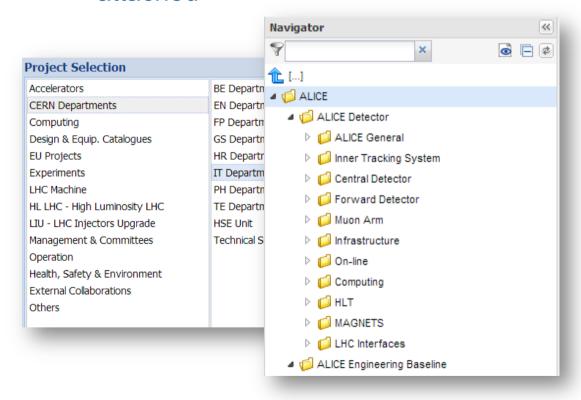
Counting House

Racks in cavern

Main electrical distribution

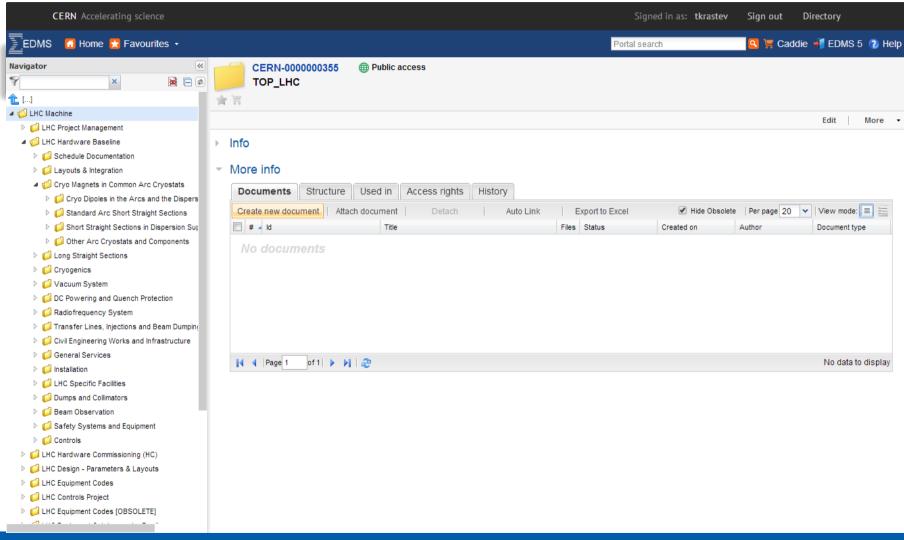
Rack monitoring and control

attached



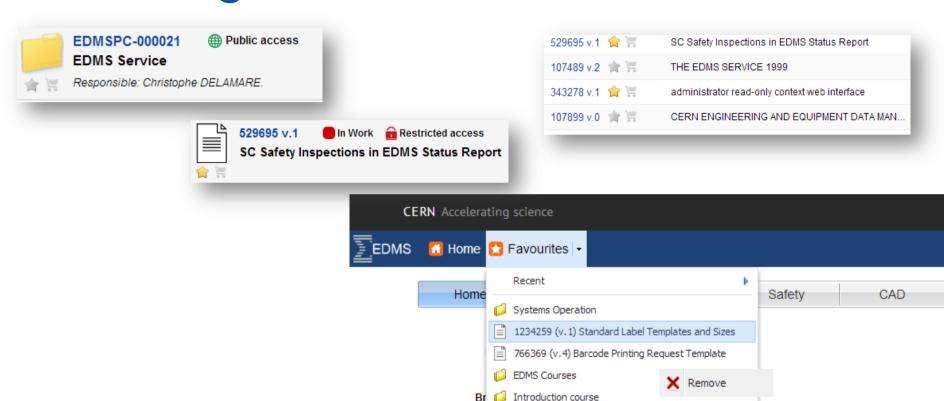


Working with EDMS



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Working with EDMS - Favourites





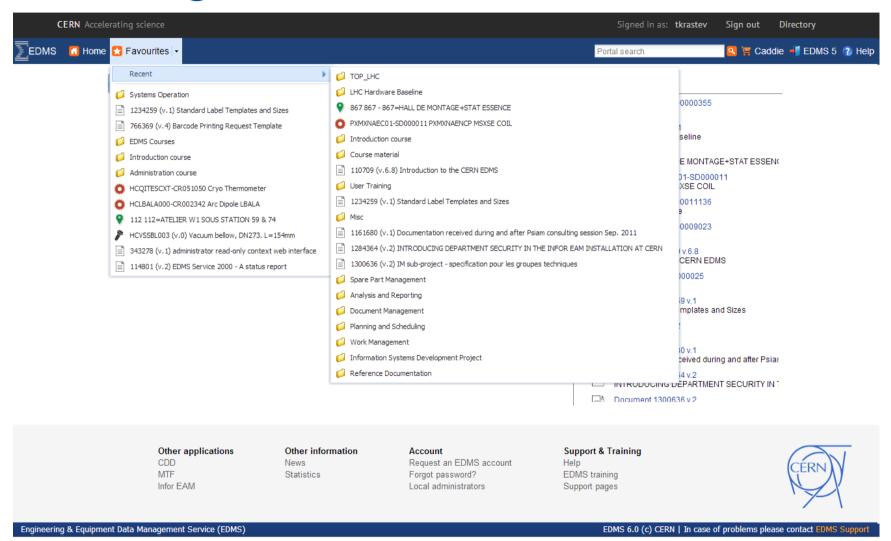
11/12/14 EDMS: 110709 v.6.8

Administration course

HCQITESCXT-CR051050 Cryo Thermometer
HCLBALA000-CR002342 Arc Dipole LBALA

112 112=ATELIER W1 SOUS STATION 59 & 74
HCVSSBL003 (v.0) Test import fixed item id

Working with EDMS - Recents





Finding Documents in EDMS

- Searching
- Browsing a Project Structure
- Favourites

Recents







Creating Documents



Creating a document

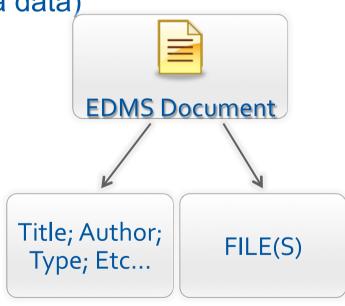
To create a document in EDMS one needs to complete a document creation form and upload the corresponding files

Enter the document information (meta data)

11/12/14

Upload the file(s)

Step 1 and 2 do not have to be performed at the same time. For example, the document meta data can be filled in to indicate that the document exists and the file upload can be done later on.





Creating a document

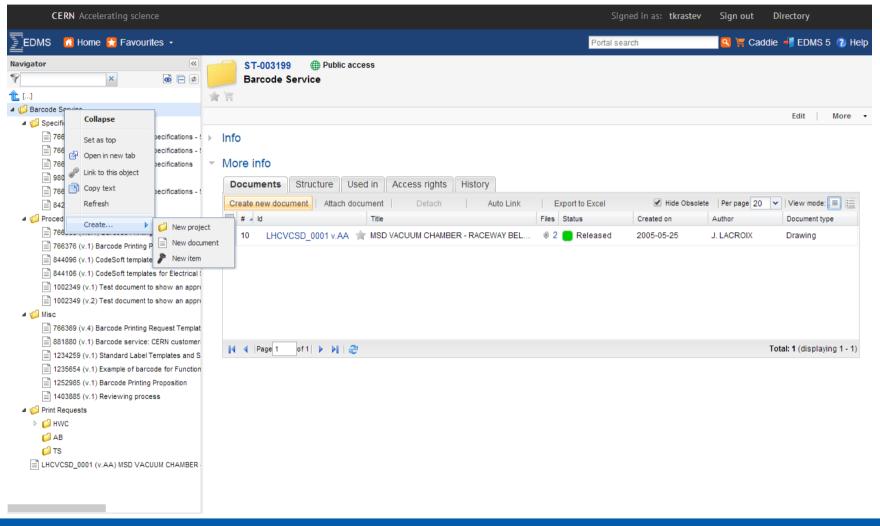
• Either go to the project where you want to create the document and click on 'Create New Document'

 Or Right Click on the project in the navigator and select Create – New Document

 You will need to have 'write' access to the project in which you want to create a document.



Creating a Document





Creating a Document

- Single document creation form
- Drag and drop files (can be added later)
- More complete metadata = easier to find
- Recommended to add EDMS doc number & version to files (visible when printed)

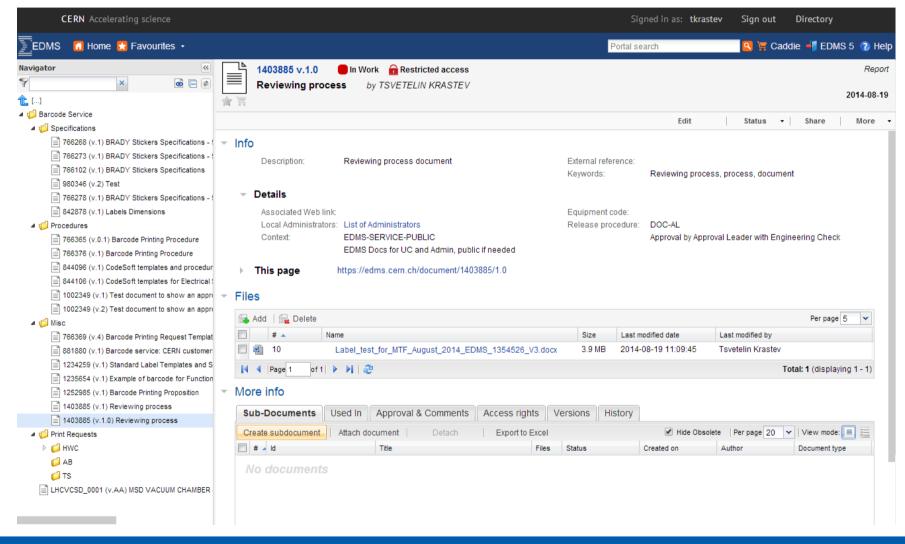


Creating a Document with Files



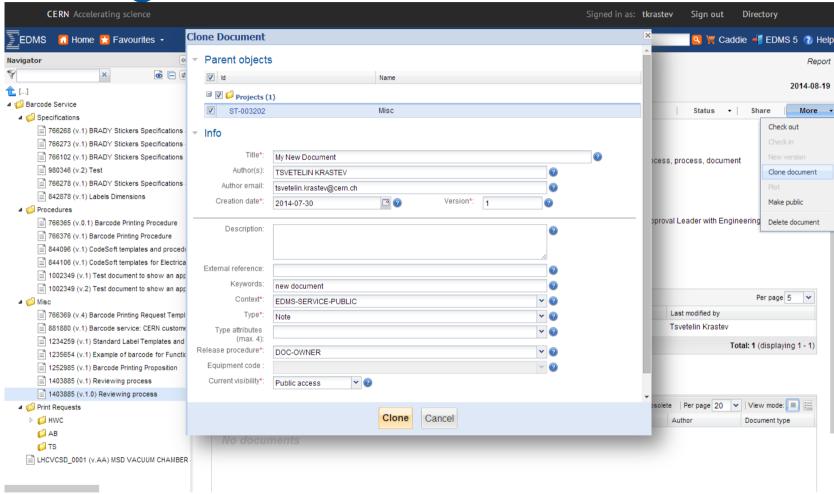


Adding Files Later





Cloning a Document



1 clone can be created at a time

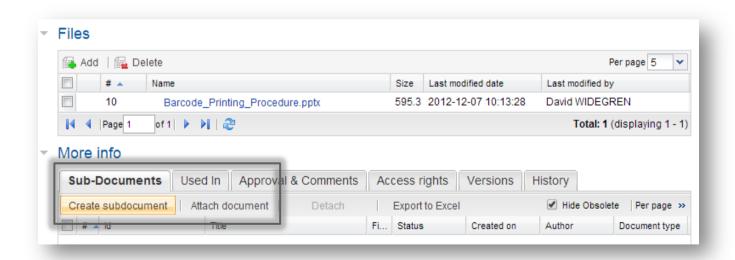
11/12/14



Sub-Documents

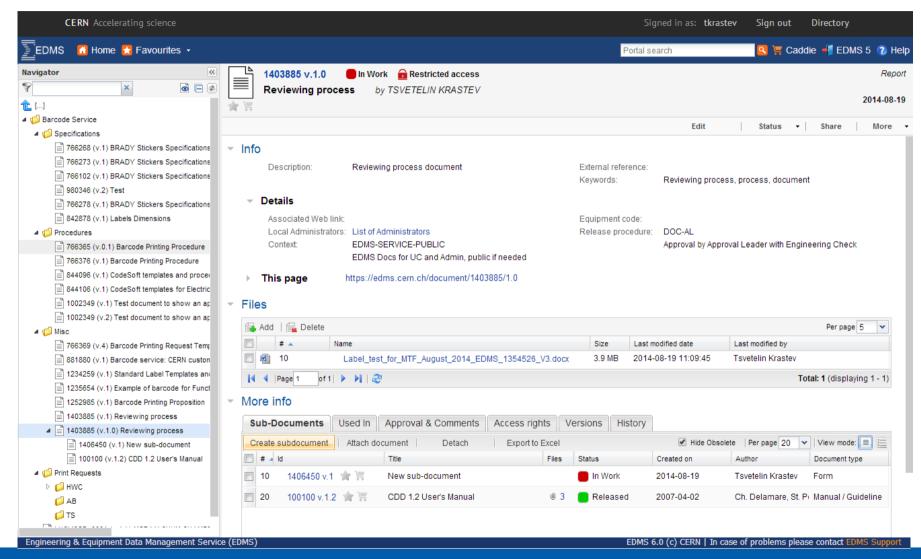
Use sub-documents to 'link' a set of documents to considered as a whole.

 E.g. A Technical Specification with Drawings and QAP subdocuments



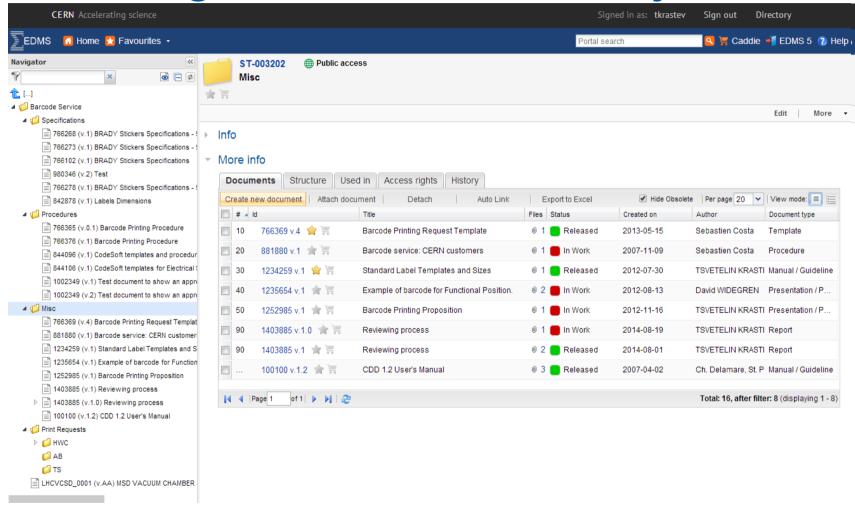


Sub-Documents





Attaching Documents to Projects



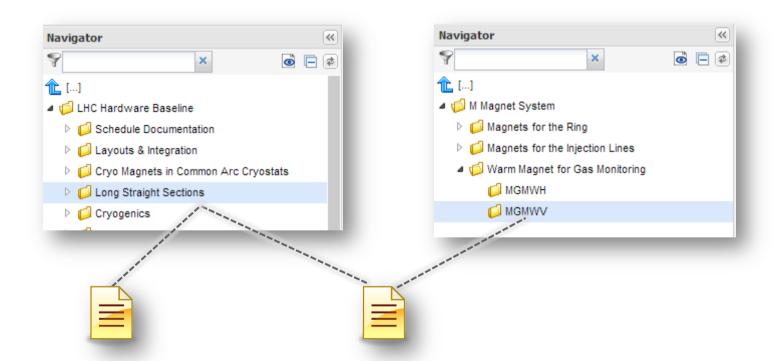
You must have at least READ access to do so

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Documents in several projects

- A single document can be attached to several structures.
- There is still <u>only one owner</u> and <u>group</u> for the document.





The document history is kept

- All actions indicate who did what and when on a doc e.g.
- creation,
- file uploads
- status changes are logged and securely stored in the system.

		Event	User	Date 🔺
		Document registration	Karl-Martin SCHIRM	2012-06-25 09:24:12
>	List of people	Simple update	Karl-Martin SCHIRM	2012-06-25 09:24:13
	Luca BRUNO (LBRUNO)	Previous version set to old	Karl-Martin SCHIRM	2012-06-25 09:24:13
	Mats LINDROOS (LINDROOS)	Status change from In Work to	Karl-Martin SCHIRM	2012-06-25 09:26:17
		Automatic notification List of pe	Username EDMSBATCH	2012-06-25 10:47:57
		Status change from Engineering	Yacine KADI	2012-06-27 15:51:06
		Reviewing process started List	Yacine KADI	2012-06-27 15:54:06
		Reviewing process stopped Lis	Yacine KADI	2012-06-27 15:55:32
		Status change from Under App	Yacine KADI	2012-06-27 15:55:32
		Shared List of people	Yacine KADI	2013-03-29 18:07:22



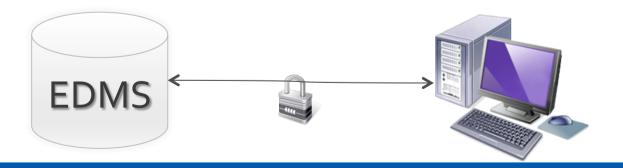


Access Rights & Visibility



Sharing and protecting work

- EDMS provides a secure and easily accessible environment where all engineering information can be stored.
- It must be possible to update data and to share information.
- To manage the access rights all objects stored in EDMS have an <u>OWNER</u> and belong to a <u>GROUP</u>.



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EDMS groups

An EDMS group

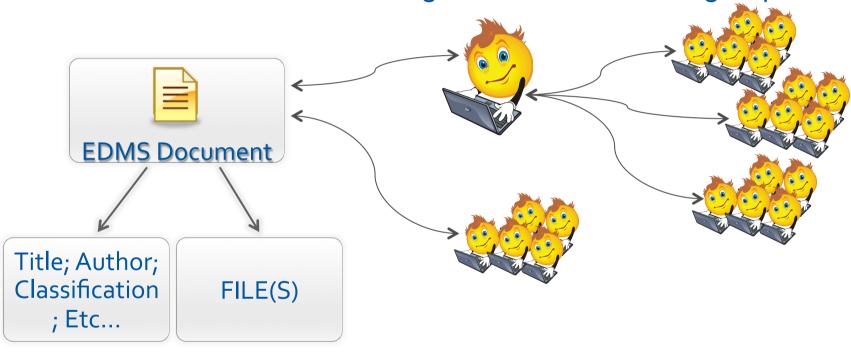


- Is used to simplify and control access to EDMS and its content
- Contains a set of users
- Grants access to these users
- Can be automatically synchronized with an e-group, HR database or EDMS groups



Owners and groups

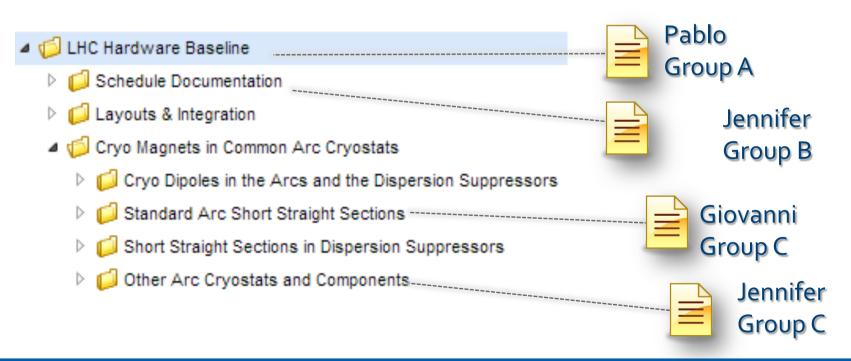
A document in EDMS belongs to an owner and a group





Ownership of projects

- Each project has an owner and belongs to a group.
- This defines who can to view the contents of a project or can attach a document.



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Who can view the documents?

Possible actions and by whom

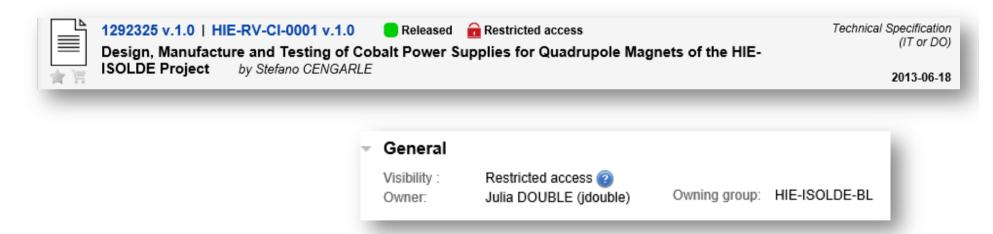
		Read:	Write:	Delete:
Visibility mode	Owner:			
	Group:			×
	World:		×	×

This is just an example of a common configuration.



Ownership of documents

- The owner of a document is by default the user who creates it in EDMS. Note that this does not necessarily have to be the author.
- The group to which a document belongs is set according to the context used to create the document.





Access rights for documents

Visibility: WORLD

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User: Anyone



Visibility: CERN Authenticated User: Anyone



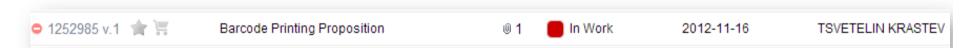


Access rights for documents

Visibility: GROUP
 User: Member



Visibility: GROUP User: Not member of group





Strict Confidentiality

Strict confidentiality hides the very existence of a document from a non-authorized user.







Document Access Levels

Based on CERN's official access rights policies



Note: Document access rights depend on context and status



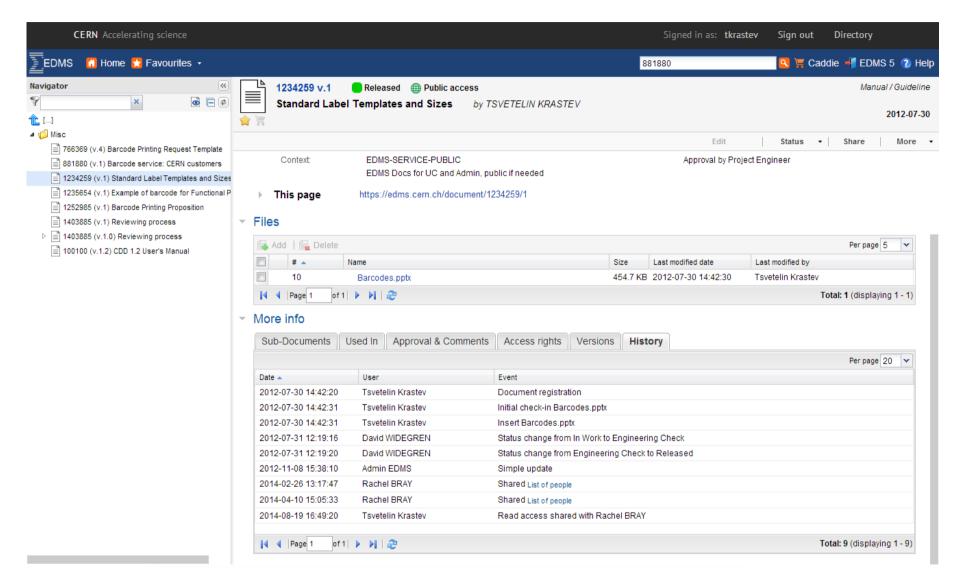
Share

- 'Share' is used for either granting Read or Write access to a person/group to a document or for distributing the given document.
- Note that an access grant is document version dependent and it does not propagate to new/old versions, cannot be revoked.





Share





Release Procedures



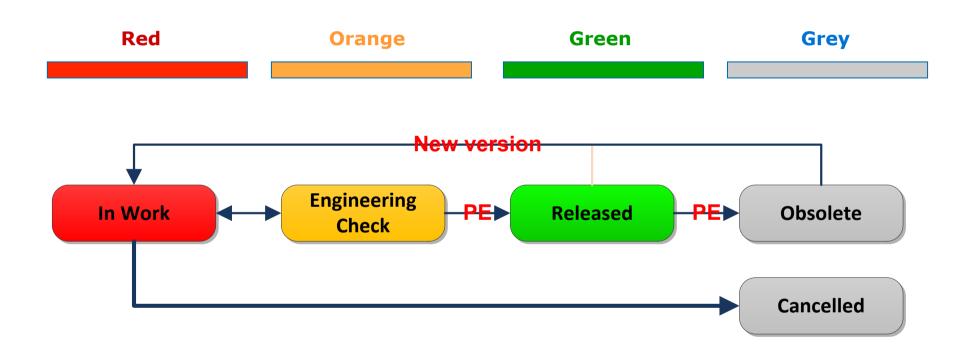
Release procedures

 A release procedure is the lifecycle of a document. It indicates the status transitions and the roles required to be able to change status.



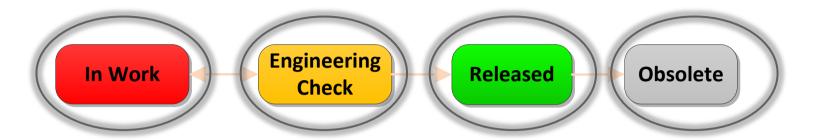


Release procedures





What is allowed when?



When in status In Work – Possible to edit the document, insert and delete files in it.

When in status **Engineering Check** – document is frozen until the check is done, it is either Released or put back to In Work

When in status **Released** or **Obsolete** – the document is frozen and only a new version can be created



Changing Statuses

Checks:

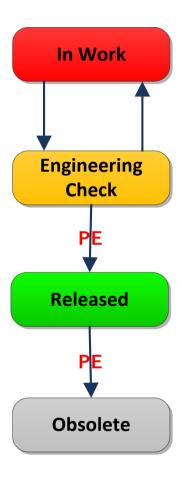
To be able to perform a status transition you have to fulfil the following criteria:

- the document must belong to a group of which you are a member
- you must have at least write access for that document
- you must have an appropriate role assigned to you in the system if required

Common roles:

PE - Project EngineerAL - Approval Leader

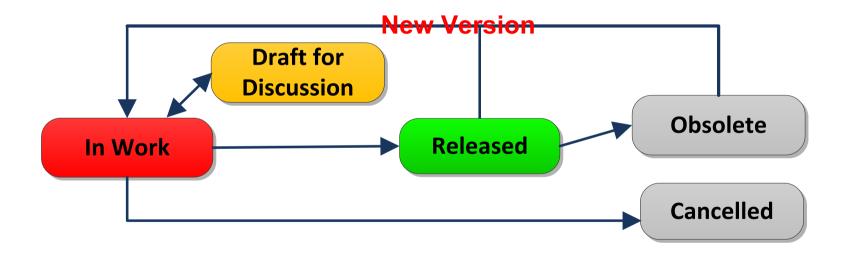
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Standard release procedures

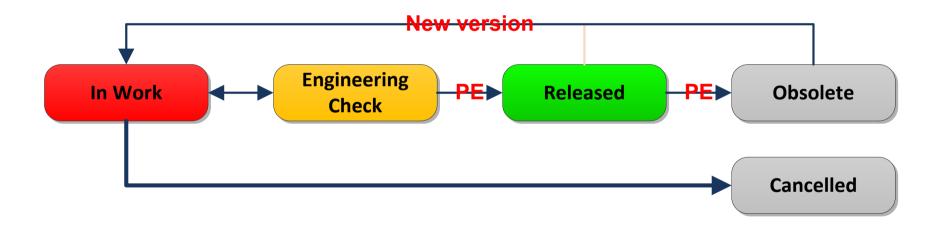
Example 1: Owner Approval (DOC-OWNER)





Standard release procedures

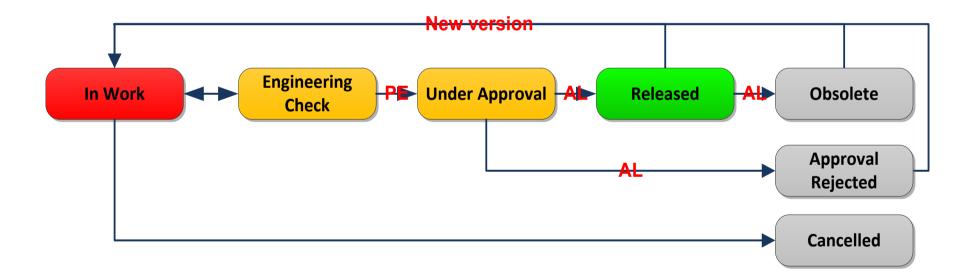
Example 2: Project Engineer Approval (DOC-PE)





Standard release procedures

Example 3: Eng. Check & Reviewing process (DOC-AL)





Different Levels of control

Examples of documents:

- Specifications
- Project reports
- Planning documents
- Quality assurance doc.

Project documentation

Examples of documents: C-OWNER (Informal)

- Meeting Minutes
- Reports
- Notes

Group/sect. documentation

Note! In the QAPs of your project/department/collaboration there are most likely rules for what type of document that should follow which release procedure. This list above is an example!



EDMS: 110709 v.6.8 11/12/14

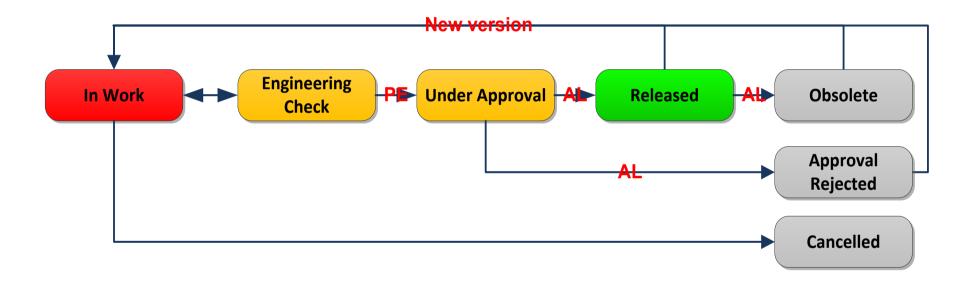
Reviewing process

In the following slides you are going to see some of the steps in a commonly used formal reviewing process; DOC-AL.



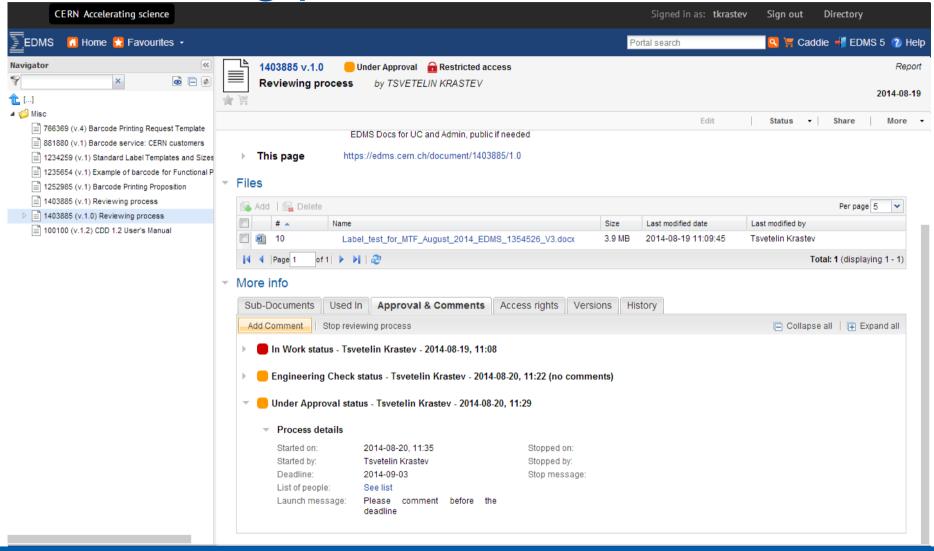


Reviewing process





Reviewing process: start



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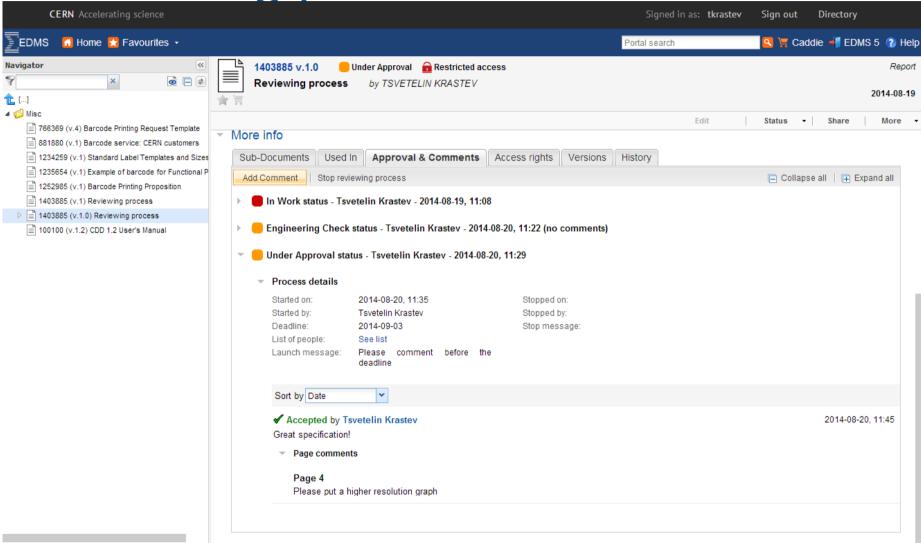
Reviewing process: comments

People involved in the approval process receive a reminder to give comments, if they haven't done so, 1 week before the deadline.

The approval leader receives a reminder 1 day before the deadline.

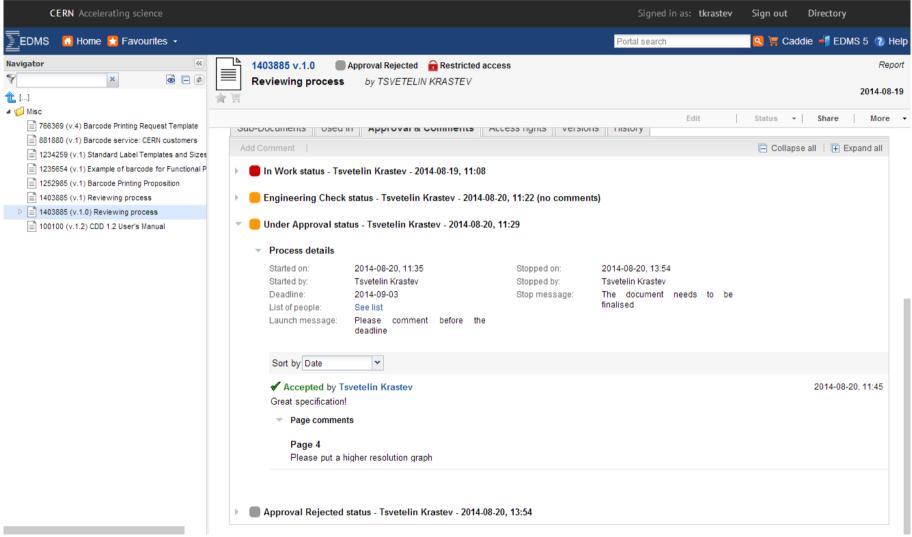


Reviewing process: comments





Reviewing process: stop





Practical example of an Reviewing process

- In practice, when the document reaches the Final Decision stage and it needs to be edited, at first it is set to Approval Rejected status by the Approval Leader without notifying people from the approval list.
- After editing, the Approval Leader creates a new version of the document and sets it to **Released** status without an official approval process. Before releasing the document he/ she notifies everyone from the approval group that this is the edited version.



Main objects in EDMS







Item

 Represents the design of components or assemblies of a certain type.

Document

 Represents information about or connected to items or projects in any format.

Project

Represents a grouping of items, projects and documents.



Best practices

- Put files in their native format and a printable format (pdf)
- Include the EDMS document ID and version # in files
- A document has one owner but can have many authors
- Documents can be attached to many other objects
- Released documents cannot be edited
- Documents undergoing a reviewing process cannot be edited





Support Organization

Central Support

- EDMS.Support@cern.ch
- Hotline 77777
- Training
- Consultancy
- Support

Local Support

 EDMS Local Administrators (management of users, access groups, structures, contexts and roles)

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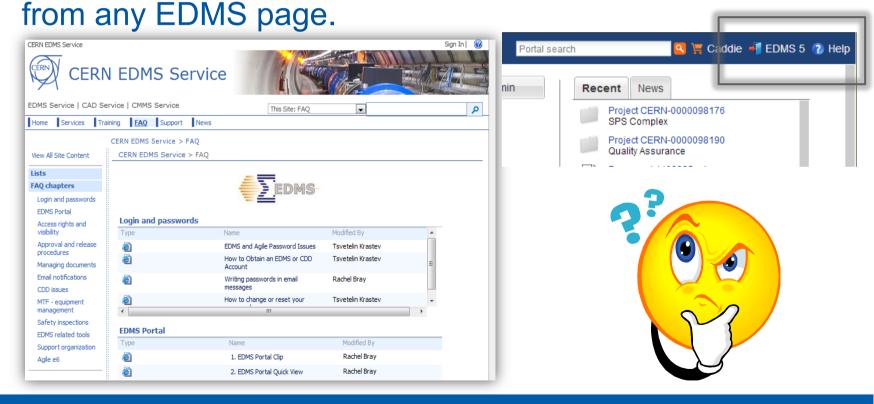




EDMS documentation and FAQs

 A set of Guidelines, Tutorials, Registration Forms and useful information is available through the EDMS Service Site. You can access it through the 'Help' link

11/12/14





Thank you for your attention!

Video: https://espace.cern.ch/edms-services/EDMS6/EDMS%206%20Tutorials.aspx

Complete course: https://edms.cern.ch/document/110709

