

EXFOR PDFs archiving improvements

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Propose an improvement to the current process of the EXFOR PDF database update

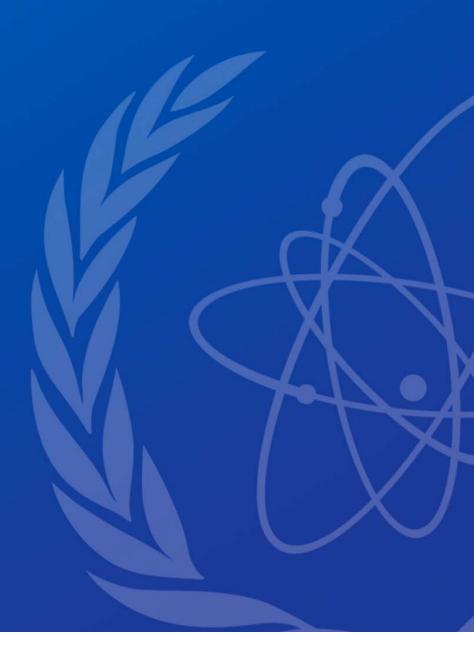
Value proposition:

+ Usability

+ Accessibility

+ Maintainability

+ Security





The EXFOR web retrieval application currently offers, to a very restricted set of users, the display of publications of various types such as journals, conferences, reports, thesis, etc., in PDF format.

This is a useful feature for EXFOR compilers and some evaluators to check and compare the data.

Sources of the publications:

- NSR
- EXFOR

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Current problem – update of the internal PDF database

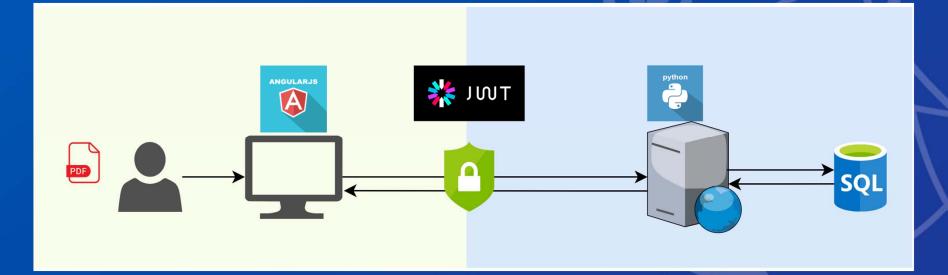
- Some PDFs are updated while others are not.
- Depends on user folders and OS.
- Several scripts involved.
- No version control.
- Low security.
- Not ideal: PDF blobs are stored on the database 200.57 GB

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Proposed solution for current system – EXFOR PDFs

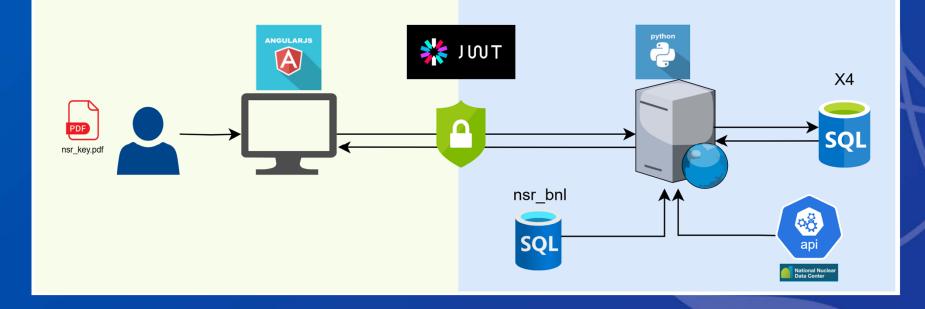
- Angular frontend
- JWT Authentication
- Python backend APIs





Proposed solution for current system – NSR PDFs

- Angular frontend
- JWT Authentication
- Python backend APIs



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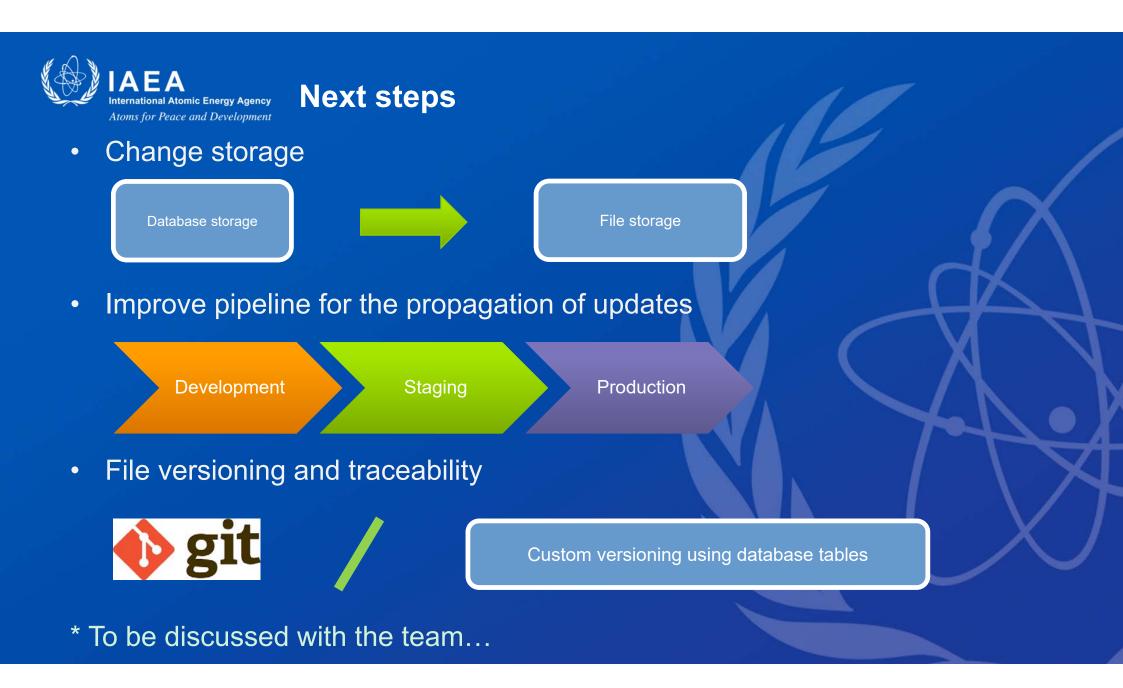
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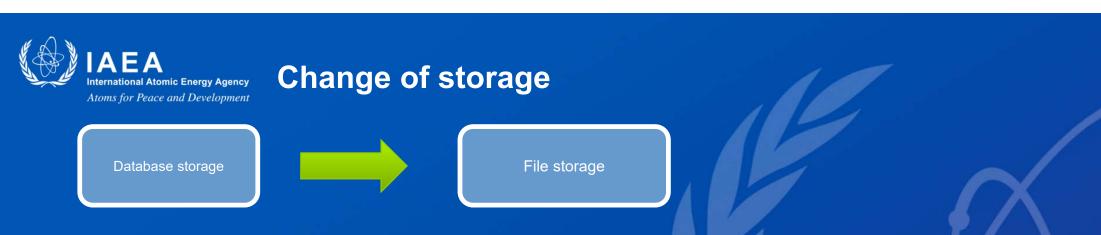
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Foreseen advantages

- Clearer and friendlier user process
- Reduction of the time it takes to update a PDF
- Internal web access
- Increased level of security
- Improved maintainability of code
- Reduce database size





- Download current PDFs from exfor table (consider the current binary obfuscation)
- Make an inventory of references and PDFs
- Clean duplicates or any other unused files
- Create file reference / metadata table
- Create folder in file system
- Create global parameter for folder (could be a table for multiple folders / folder versions)
- Store PDFs in folder
- Populate new table with file references

* To be discussed with the team...



Thank you!