

The Applications Ecosystem

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On behalf of the CERNBox team

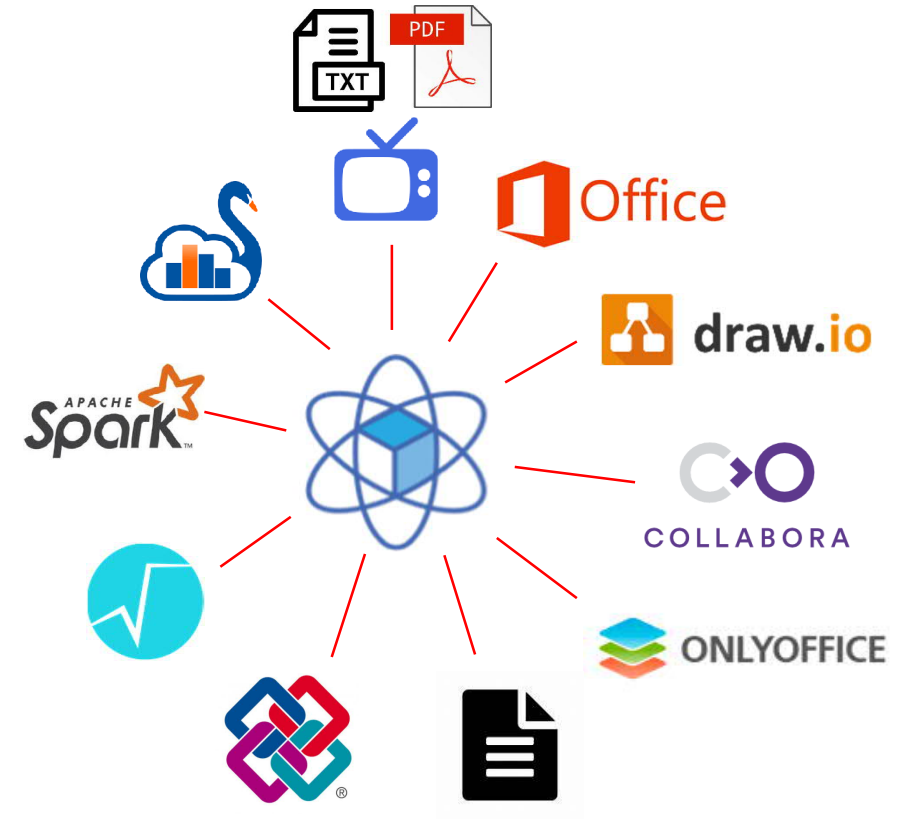
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A bit of history...

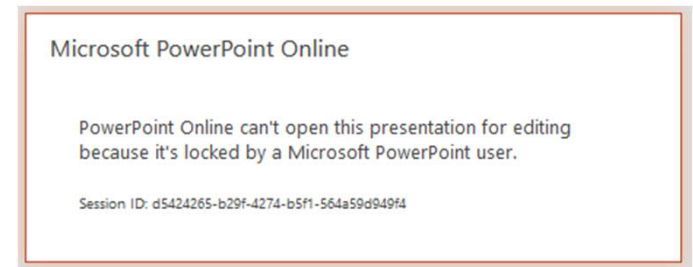
- 2014: Native text editor, PDF/picture viewer
- 2016: SWAN (Service for Web-based ANalysis)
 - 2017: ROOT viewer and iNotebook viewer
 - Later integrating Apache Spark for analysis at scale
- 2017: Microsoft Office
- 2018: DrawIO for flow diagrams
- 2019: OnlyOffice, Microsoft Project Gantt viewer
- 2020: Collabora Online (ODF), CodiMD (Text/Markdown)
- 2021: IFC viewer (Industry Foundation Class, CAD-like format)
- Today: [New framework to easily incorporate new applications](#)
- The apps portfolio is being reviewed, following the end of the MALT project





Collaborative or concurrent editing?

- CERNBox is accessible as a filesystem for Desktop apps as well
 - Popular cloud storages do not offer such option!
- Interplay with web apps and sync clients can be challenging
 - Protections to **avoid silent file overwriting**
 - But then, “*who is editing my file?*”
 - And some apps (SWAN, text, DrawIO) do not support collaborative editing
- Plans
 - Ability to **lock/checkout** a file for exclusive usage:
“*This file is mine now, please don’t touch it!*”
 - Clearly marked in the web UI and for the sync clients
 - More collaborative features to come - *see Roadmap later in this session*

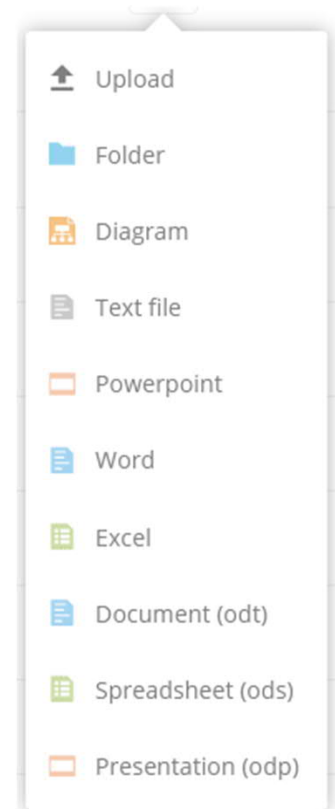




What's next?

- Very diverse set of file types: 10,000+ different file extensions!
 - Code, TXT, ROOT, PNG, PDF prominently at the top
 - Lots of binary and text data, plenty of machine-generated files, ...
 - **Human-managed files represent use-cases from all CERN Sectors**
 - Examples: 5M Office, 10M LabView, 28M Python, etc.
- Any web app useful for your work that we should consider?
 - Viewer / Editor / Collaborative editor
- Likewise, any app we should discontinue?

Please let us know in the Q&A doc!





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Thank you

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