DS-1021 Add integration with an online document viewer

JIRA Reference: https://jira.duraspace.org/browse/DS-1021

Proposed: DS-1021 is a request for DSpace to add integration with an online document viewer. This request is part of a larger trend in which DSpace users are asking for better functionality in order to display the material in their repositories in a usable fashion, not just documents, but audio and video files as well. Requests for a streaming solution include a poster at OR11 [1], and an email to the DSpace general list [2] requesting information about enabling streaming with products such as JW Player. It was also discussed during the Committer's Meeting at OR11 [3][4]. Rather than asking our programmers to continue to find ad hoc solutions and our users to download or link out to any number of players, I propose that the request in DS-1021 be expanded to include an embedded streaming server, as well as corresponding embedded clients in a DSpace theme, which can handle document viewing as well as streaming media and be adoped by DCAT and the committers as functionality to be included in the next release of DSpace.

While using a DSpace theme that can embed viewers would be an easier option, an embedded streaming server to go with the viewers would provide better user experience. Streaming servers not only perform better for most users but allow random seek (the user can skip around through files to seek specific parts of the content). There are open source server options available which could be integrated with DSpace to provide the needed functionality and it's my understanding that some DSpace installations are already working with their own solution. Some might propose DuraCloud, which supports streaming, but the stream isn't actually DuraSpace produced, it's simply streaming from the cloud. This is an added complication for institutions that are cloud-resistant and discourage their members from using anything based in the cloud. Also, as this week's Duracloud Webinar made clear, the DSpace integration with DuraCloud replicates content in the cloud as AIPs, which are just zip files, and thus are not capable of streaming. Simply put, streaming from DuraCloud is not yet an option, and may never be a practical option, given the reluctance on the part of some universities to entrust non-open-access content to the cloud.

Initial assessment: Relevant to the community--we have the material stored, now we need to make it easily accessible. Medium-high priority.

- If you agree that this feature is important and have no additional comments, you can simply respond with a +1.
- If you disagree but have no comments, a -1 works, and if you have no opinion at all, 0 is fine. (And encouraged, since that means we know you've had a chance to weigh in.)
- If you do have comments or other ideas, you're not limited to the numbers, of course. So please do share your thoughts!
- [1] https://conferences.tdl.org/or/OR2011/index/search/presenters/view?firstName=Elias&middleName=&lastName=Tzoc&affiliation=Miami% 20University&country=US
- [2] http://sourceforge.net/mailarchive/forum.php?thread_name=DEB600B0F083BD4E915FBA181FA85975FA34133DE3%40EXBE.fit.edu&forum_name=dspace-general
- [3] https://wiki.duraspace.org/display/DSPACE/DevMtg+2011-06-06+-+OR11+Meeting
- [4] http://piratepad.net/or11dspacemeeting