

APTrust Answers to Cost Questions suggested by the MetaArchive Cooperative in Spring 2015 (<https://www.metaarchive.org/cost-questions>)

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APTrust Note: The questions involved appear focused on uncovering hidden costs and other surprises that might be part of commercial solutions for digital preservation. APTrust is a collaboration between institutions of higher education founded on principles of complete transparency, so some of the questions are not precisely tailored for our type of organization. If you'd like any further detail on any answer or on any other aspect of APTrust, please contact us at info@aptrust.org.

1. What are the solution provider's licensing, subscription or membership fees?

ANSWER: \$20,000 per year for each member institution (includes participation in governance activities, two no-registration-fee consortial in-person meetings per year, requires participation in consortial activities, also includes 10 TB of content preserved for the year).

- **Have these fees increased or decreased over the past three years, and why?**

ANSWER: No

- **How often is the fee structure reviewed? And how are fees set?**

ANSWER: Continuously. Governing Board (comprised of members) sets fees.

- **How are customers/subscribers/members consulted during such reviews?**

ANSWER: Through the Governing Board, they review and set them.

2. Are additional memberships required to participate in the solution?

ANSWER: No.

- **If so, what are the fees associated with those memberships?**

3. Is there a minimum licensing/subscription/membership term?

ANSWER: Minimum and maximum are currently the same: one year.

4. What are the solution provider's storage fees?

ANSWER: First 10 TB of content to be preserved (which actually results in 60 TB of storage through replication) is included in membership fee. Additional blocks of content are currently charged at \$420 per TB. To reiterate: we quote costs by quantity of content to be preserved—the actual storage associated is six times that amount.

- **Have those fees increased or decreased over the past three years, and why?**

ANSWER: The costs for "extra" 5 TB blocks was reduced from \$4,250 to \$2,750 early in 2016 because our experience with greater volumes of content justified the reduction in rates. It was further reduced on April 11, 2017, to \$2,100 per 5 TB block.

- **How often is the fee structure reviewed? And how are fees set?**

ANSWER: Same as 1, above.

- **How are customers/subscribers/members consulted during such reviews?**

ANSWER: Same as 1, above.

5. Are there limits on the numbers or size of collections that can be deposited?

ANSWER: No limit on collection size or numbers.

- **Is there a maximum amount of storage that can be utilized?**

ANSWER: Our storage environment is Amazon Web Services, and we do not have a limit.

6. How does the solution provide for increases in storage capacity?

ANSWER: As noted in 5, we can flex storage as needed by any depositor.

- ***And how do these increases affect fees, if at all?***

ANSWER: If we receive reduced per-volume pricing for Amazon as a result of increased total storage, that reduction will be passed to the depositors via reduction in rates.

7. *Do any fees paid (licensing/subscription/membership/storage) include geographically distributed copies of content?*

ANSWER: Yes

- ***If so, how many copies and in what geographic locations?***

ANSWER: We store three copies in AWS's S3 service in Virginia and three more in Glacier in Oregon. We conduct APTrust fixity checks on the content in the S3 service every 90 days (in addition to the AWS built-in fixity checking on both services).

- ***If not, what's the additional cost for this option?***

ANSWER: Included in the base cost.

8. *Am I responsible for obtaining any additional hardware or software at my own expense to work with the solution?*

ANSWER: No.

- ***If Yes, what are the average hardware/software costs?***
- ***Does the solution provider publish specifications or requirements?***
- ***What is the recommended replacement cycle?***
- ***Are there any additional costs for security (e.g. encrypted storage)?*** No.

9. *What are a few specific examples of tasks, services, or resources that my fees for this solution are supporting (e.g., staff salaries, infrastructure upgrades, research and development, etc.)?*

ANSWER: APTrust is a consortium of higher education institutions, governed by those institutions. All costs are publicly reported in categories (such as revenues from memberships and any other sources (including the beyond-allocation storage fees noted above)), AWS costs, staff compensation, staff travel, event costs (for the two face-to-face meetings held per year), and all others.

10. *On what schedule are customers/subscribers/members billed?*

ANSWER: Standard membership fees are billed in late spring; storage beyond the allocated amount is tracked on a monthly basis—if it persists, billing for the extra-storage fees commences.

11. *Does the solution charge a one-time setup, implementation, or initial ingest fee, above and beyond any ongoing fees?*

ANSWER: No.

12. *On average, how long does it take to begin using the solution once a contract or service license agreement (SLA) has been signed?*

ANSWER: In our experience, APTrust has been ready to accept deposits long before the institutions have completed their processes of selection and technical preparation of the content for deposit. But because technical preparation for ingest is a depositor responsibility in our environment (and because we can scale the AWS components to the demand rapidly), deposit can commence as soon as the institution has accounts created (that takes place within one or two business days after the institution provides identity information on appropriate staff).

- ***What steps are involved?***

ANSWER: Provisioning accounts as noted above, along with discussion between staff actually doing the deposits to ensure good understanding of the technical specifications of the ingest format (Bagit) and the accompanying data that APTrust needs with the deposit (minimal).

13. Does the solution provide basic documentation and instructions on getting started?

ANSWER: Yes, although we have a member-team working for better clarity of that documentation/instruction set.

14. Does the solution provider prepare content for ingest?

ANSWER: No, although APTrust developers are working on a tool to be released in Spring 2018 that allows for drag-and-drop ingest (the tool accomplishes the “bagging” of content).

- ***If so, do any fees being paid cover tasks like verifying inventories, performing fixity checks, and/or repairing any files that may get damaged in the process of sending content to the solution provider?***

ANSWER: As worded, this question is a little difficult to answer. Certainly no additional fees are charged for any functions that APTrust does in this regard. We have automated processes that detect failures in various steps of the deposit and that verify checksums on packages deposited, etc. If deposit mechanisms fail, the system detects the failure and automatically queues the material for re-deposit. Early in our process, our system checks the deposit for conformity with requirements, and notifies the depositor if the deposit was rejected because it doesn't conform.

- ***If not, does the solution provider cover/defer any costs to train or outsource?***

ANSWER: APTrust, as a consortium of institutions collaborating on preservation solutions, is founded on the notion that all participants help each other. Peer sharing of information is common and very effective, and it is cited often as one of the reasons that members value their participation in APTrust. We offer a combined team of staff and member-specialists to provide help to an institution in the early stages, but that depends on availability of the resources, most of whom would be volunteers. In any case, there is no cost to the depositor for these support activities.

15. To what degree are the steps related to ingest, description, preservation, etc., automated?

ANSWER: In APTrust, many of these steps are automated (although the term “description” in the question needs clear definition to ensure we're addressing that question). We are happy to provide much more detail on this to any interested parties.

16. If the solution is a non-profit (or run by one), are copies of the annual operating budget and financial statement shared with the members.

ANSWER: We already do this, and we're planning to do so at greater frequency than annual (so members can see budget updates through the year).

- ***If not, are there plans to?***

ANSWER: See above.

17. In terms of sustainability, does the solution provider have a strategic plan, succession plan, or disaster recovery plan?

ANSWER: Yes, and we're working toward trusted digital repository certification.

- ***If so, how up to date are such plans?***

ANSWER: Most documents containing these components were adopted in the May to October 2015 range.

- ***Has the solution provider engaged in any audits, or risk assessments?***

ANSWER: We have a member workgroup developing an approach for APTrust to achieve trusted digital repository status, and in addition to that team's reviews and assessments, we'll soon undertake a security assessment of APTrust with the help of the security specialists at one of our member institutions.

- ***Are any of the plans or audit/assessments publicly available?***

ANSWER: We will make all such results available to the public, with the exception of any detail that, if published, would represent a risk to depositor content.

18. Is there a charge for retrieving content from the solution?

ANSWER: Not anticipated at present because we don't anticipate that this will be a frequent request. If it becomes a frequent activity that generates significant unanticipated cost, we will reconsider this stance.

- ***If yes, how much is it?***

ANSWER: No charge at this time.

- ***How is this charge calculated and what does it cover?***

ANSWER: If a fee is ever considered in the future, it will be designed to cover the actual costs of providing that function, proposed by staff for review by the member Advisory Committee, which will forward its recommendation to the member Governing Board for approval.

- ***Under what terms? Are there any restrictions and limitations?***

ANSWER: See above.

19. Is there any charge for deleting content from the solution?

ANSWER: No. Any authorized depositing-institution official can inform the staff of the request for deletion.

- ***If yes, how much is it?***
- ***How is this charge calculated and what does it cover?***
- ***Under what terms? Are there any restrictions or limitations?***

20. [Question 20 is for depositors, not the repository provider.]