In the Thicket of It with the NDSA Standards and Practices Working Group: Cultivating Grass Roots Approaches to Real-World Digital Preservation Issues

Winston Atkins
Duke University Libraries
Campus Box 90189
Durham, NC 27708-0189
+1-919-660-5843
winston.atkins@duke
.edu

Erin Engle
Library of Congress
101 Independence Ave,
S.E.
Washington, DC 20540
+1-202-707-1120
eengle@loc.gov

Andrea Goethals
Harvard Library
90 Mt. Auburn St.
Cambridge, MA 02138
+1-617-495-3724
andrea_goethals@ha
rvard.edu

Karl J. Jackson
United States Marine
Band (retired)
8th & I Sts., S.E.
Washington, DC 20390
+1-202-433-4398
karl.j.jackson@gmail.
com

Carol Kussmann
University of Minnesota
Libraries
499 Wilson Library
309 19th Avenue South,
Minneapolis, MN 55455
+1-612-626-0099
kussmann@umn.edu

Kate Murray
Library of Congress
101 Independence Ave,
S.E.
Washington, DC 20540
+1-202-707-4894
kmur@loc.gov

Michelle Paolillo Cornell University 218 Olin Library Ithaca, NY 14853 +1-607-255-1038 map6@cornell.edu Mariella Soprano
Caltech Archives &
Special Collections
Mail Code 015A-74
Pasadena CA 91125
+1-626-395-2501
mariella@caltech.edu

ABSTRACT

The engaged membership of the National Digital Stewardship Alliance's Standards and Practices (S&P) Working Group are active digital preservation practitioners. One of five National Digital Stewardship Alliance (NDSA) working groups, S&P projects and discussions originate from real-world issues that members face in their daily work. Since 2010, the S&P has sought to identify community knowledge gaps for the "on-theground practitioners" across a broad spectrum of content areas and to work collaboratively to bridge those gaps. Some of the topics recently addressed by the S&P include preservation of digital artworks, issues related to optical media, stumbling blocks for preserving video collections and analyzing risks and benefits of the PDF/A3 format for archival institutions among many others. Using the visual imagery of a fruit tree, this poster explores the grass roots nature of S&P projects and products, from the foundational member institutions comprising the soil and roots, through the trunk and branches of the tree addressing different topics, and finally reaching to the individual leaves and fruit representing project outcomes and deliverables, as well as work still to do. The goal of the poster is to highlight the self-organizing nature of the S&P's varied projects as well as to increase community awareness of the collaboratively developed resources and products.

General Terms

Institutional opportunities and challenges; Infrastructure opportunities and challenges; Frameworks for digital preservation; Preservation strategies and workflows; Innovative practice; Training and education.

Keywords

Best Practices, Community, Collaboration, Education, Standards, Survey

1. INTRODUCTION

Since 2010, the membership of the NDSA S&P Working Group have come together to discuss current and pressing issues in preserving digital material amongst a set of engaged and active practitioners working in the field. [1] S&P projects and discussions are generated by real-world issues and concerns that members face in their daily work. Working as a community of peers, S&P members have sought to identify community knowledge gaps for the "on-the-ground practitioners" across a broad spectrum of content areas and to work together collaboratively to bridge those gaps. The goal of the poster is to highlight the self-organizing nature of the working group's varied projects as well as to increase community awareness of the collaboratively developed resources and products.

2. THE NDSA

The NDSA is a consortium of institutions that are committed to the long-term preservation of digital information. [2] The NDSA's mission is to establish, maintain, and advance the capacity to preserve digital resources for the benefit of present and future generations. The NDSA comprises over 160 participating institutional members from 45 states and include universities, consortia, professional societies, commercial businesses, professional associations, and government agencies

iPres 2015 conference proceedings will be made available under a Creative Commons license.

With the exception of any logos, emblems, trademarks or other nominated third-party images/text, this work is available for reuse under a Creative Commons Attribution 3.0 unported license. Authorship of this work must be attributed. View a copy of this licence.

at the federal, state, and local level. The NDSA was launched as a membership organization in July 2010 as an initiative of the Library of Congress's National Digital Information Infrastructure and Preservation Program. [3]

2.1. Standards and Practices Working Group

The S&P melds the expertise from the digital preservation community with practitioners' everyday needs to facilitate a broad understanding of the role and benefit of standards in digital preservation and how to use them effectively to ensure durable and usable collections. The S&P also works actively, in collaboration with other individuals and organizations where appropriate, to identify, promote, and widely disseminate practices found to be effective for selecting, organizing, describing, managing, preserving and serving digital content. The activities and the outputs of the group are shared broadly including the Library of Congress Signal blog and the Library of Congress Digital Preservation web site. [4] Since 2011, when the blog launched, S&P-related blog posts, web pages and reports have received more than 16,370 page views.

3. PROJECTS AND PRODUCTS

Work in the S&P originates from the interests and issues of the active membership. Projects germinate organically, often from the groups' round robin "what are you working on?" discussions. An issue is identified from real-world concerns and an action team of volunteers comes together to work on the problem collaboratively. Our range of projects is wide-reaching and varied, reflecting the diverse interests of the membership.

3.1. Media Projects

Optical media: The S&P invited speakers with a varied range of experience to explore issues with optical media. Represented institutions include Library of Congress, AVPreserve, George Blood Audio Video Film, WNYC and BMS/Chace. Topics included data extraction, physical condition issues, and emerging formats.

Software-based Art: The S&P invited experts from four collecting institutions (SFMOMA, MoMA, Rose Golden Archive of New Media Art, and Smithsonian Institution Time Based Media Art project) to share their experiences in both preserving and providing access to digital art works and other new media.

3.2. Format Projects

Video: Many practitioners consider digital video preservation problematic. The S&P hosted several video-related efforts including the Federal Agencies Digitization Guidelines Initiatives (FADGI) reports on comparing file formats for video reformatting and *Creating and Archiving Born Digital Video* as well as video preservation efforts at Stanford, Harvard and NYU Libraries. These led to a "Video Deep Dive" subgroup which developed and conducted the Stumbling Blocks to Preserving Video Survey to identify and rank issues that may hinder digital video preservation.

PDF/A3: The S&P wrote a report that takes a measured look at the costs and benefits of the use of the PDF/A-3 format, especially as it effects content arriving in collecting institutions. [5]

Email: The S&P helped initiate an Email Interest Group to discuss issues, projects and workflows to preserve email; contributed to an Archiving Email Symposium and workshop; and held online tool demonstration sessions with presentations from Harvard, Stanford, Smithsonian Institution Archives and others.

3.3. Content Packaging and Metadata

The S&P organized several sessions around content packaging and metadata. Speakers from the Library of Congress, Harvard, NARA, Georgetown University Libraries and Portico covered packaging forms, SIP components and metadata concepts covered by AS-07 MXF and METS. Other sessions covered tools, practices and workflows for metadata in audiovisual collections. Speakers included AVPreserve (AVCC and Catalyst tools), WGBH, and the Canadian Museum for Human Rights.

3.4. Organizational Practices

Staffing Survey: The S&P conducted a survey to determine how institutions staffed and organized preservation functions, produced an award-winning poster at iPRES2012 along with a detailed report and deposited the raw data in ICPSR.

National Agenda: The S&P contributed significant input and informed actionable recommendations to the *Organization Policies and Practice* chapter of the NDSA 2015 National Agenda for Digital Stewardship. [6]

3.5. Communicating Standards and Practices

Content Integrity/Fixity: S&P members contributed significant input to the NDSA publication, *Checking Your Digital Content: What is Fixity and When Should I be Checking It?* [7]

Levels of Preservation: S&P members contributed significant input to the NDSA publication, *Levels of Preservation*. [8]

Conference Participation and Knowledge Sharing: S&P members made presentations about the *Levels of Preservation* at IS&T Archiving 2013, the 2013 NE NDSA Regional Workshop, the 2013 SAA Annual Conference, and iPRES 2013; and presented at Digital Preservation 2014 on *Checking Your Digital Content: What is Fixity and When Should I be Checking It?*

Wikipedia's Digital Preservation Entry: S&P members initiated a project to improve Wikipedia's coverage of digital preservation in general, but particularly in areas related to digital preservation terms, concepts, theories, strategies and history; standards, best practices and common methods; preservation repository architecture, operations and policies and certifying the trustworthiness of preservation repositories. While this Wikipedia article continues to evolve with recent contributions, S&P members helped frame the article by developing a new outline for the digital preservation article and improve the resources and citations.

In addition, the S&P periodically organizes "conference recap" sessions to expand the peer-to-peer network and share experiences and knowledge gained at conferences such as the Library of Congress Storage meeting, Research Data Alliance, iPRES, AMIA Hack Day, ICA, DLF Fall Forum and IASA. S&P members also periodically share updates on projects they are working on outside of the NDSA which have included the

UDFR, the Academic Preservation Trust, data management guides, DPN, repository self-assessments, a Drupal-based TRAC tool and many different institutional projects.

4. NEXT STEPS: FUTURE AGENDA

The S&P has identified several future projects including:

- Criteria for evaluating data repositories
- Metadata for complex objects to be emulated
- Updates on PREMIS 3, coverage of PBCore, EBU Core, SMPTE Core, and Bit Curator's DFXML.
- Standards adoption
- Preservation terms of service / SLAs
- Sustainability of our tools
- Preservation of social media

5. ACKNOWLEDGEMENTS

As a community driven organization, S&P is an organization of peers. The poster creators wish to thank all current and former S&P members and co-chairs, other NDSA Working Group members and invited speakers for their contributions to our collaborative efforts.

6. REFERENCES

- [1] National Digital Stewardship Alliance (NDSA). 2015. Standards and Practices Working Group. Accessed: September 18, 2015. http://www.digitalpreservation.gov/ndsa/working_groups/standards.html
- [2] National Digital Stewardship Alliance. 2015. Accessed: Accessed: September 18, 2015. http://www.digitalpreservation.gov/ndsa/index.html

- [3] National Digital Information Infrastructure and Preservation Program (NDIIPP). 2015. Accessed: September 18, 2015. http://www.digitalpreservation.gov/
- [4] Murray, K. June 29, 2015. We did all that? NDSA S&P project recaps. In *The Signal*. Accessed: September 18, 2015. http://blogs.loc.gov/digitalpreservation/2015/06/wedid-all-that-ndsa-sp-project-recaps
- [5] NDSA Standards and Practices Working Group. February 2014. The benefits and risks of the PDF/A-3 file format for archival institutions. Accessed: September 18, 2015. http://www.digitalpreservation.gov/ndsa/working_groups/d ocuments/NDSA PDF A3 report final022014.pdf
- [6] NDSA. September 2014. 2015 National agenda for digital stewardship. Accessed: September 18, 2015. http://www.digitalpreservation.gov/ndsa/documents/2015N ationalAgenda.pdf
- [7] NDSA Standards and Practices and Infrastructure Working Groups. 2014. Checking your digital content: what is fixity and when should I be checking it? Accessed: September 18, 2015. http://digitalpreservation.gov/ndsa/working_groups/docume nts/NDSA-Fixity-Guidance-Report-final100214.pdf
- [8] Phillips, M., Bailey, J., Goethals, A. and Owens, T. 2013. Elaborating on the NDSA levels of preservation. In Proceedings of IS&T Archiving Conference 2013 (ARCHIVING 2013) (Washington, DC, USA, April 5, 2013). Accessed: September 18, 2015. http://www.digitalpreservation.gov/ndsa/working_groups/documents/NDSA_Levels_Archiving_2013.pdf