'DIGITAL PRESERVATION: THE PLANETS WAY': OUTREACH AND TRAINING FOR DIGITAL PRESERVATION USING PLANETS TOOLS AND SERVICES

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ABSTRACT

This paper outlines the Europe-wide programme of outreach and training events, jointly organised by HATII at the University of Glasgow and the British Library, in collaboration with a number of European partner institutions, on behalf of the Planets project (Preservation and Long Term Access Through Networked Services) between June 2009 and April 2010. It describes the background to the programme and the events which took place during the final year of the project, focussing on the success of the events based on feedback results, lessons learned from the production of the series, and the perceived longterm impact of the programme on future Planets and digital preservation training activities.

THE PLANETS CONTEXT

The Planets project was a four-year project cofunded by the European Union under the Sixth Framework Programme to address core digital preservation challenges. It ran for four years from 1 June 2006, delivering research, tools and services resulting from the collaboration of sixteen partners across Europe, including national archives and libraries, higher education and research institutions and major IT companies.

The main aim of the project was to design, build and deliver practical tools and services to enable long-term access to cultural and scientific digital assets across Europe. These tools and services were planned to be highly automated and easily scalable, in order to minimise costs and maximise compatibility with the widest possible range of users. Main achievements of the project include the development of Plato preservation planning tool, the Testbed experimental preservation environment, and an extensive range of innovative research into a variety of digital preservation issues, methodologies and approaches to help users understand, define, and protect their collections, and to approach digital preservation in an integrated way.

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THE PLANETS TRAINING APPROACH

As part of its remit to maximise efficient uptake of Planets tools and services, the project delivered a training programme offering learning opportunities to staff in memory institutions such as national archives, libraries and large content-holding organisations. The perceived role of the training was not to organise and deliver events in isolation; instead it was expected to be a public face of the project, providing a conduit between the innovations of the project and its user communities to maximise take-up of Planets methods, products and services. As a result, a comprehensive and timely programme was required which would fulfil the needs and requirements of a number of groups.

Work on the programme began with the production of a detailed training plan¹. The plan looked at developing a programme using a modular approach, which would provide self-contained sessions which could be integrated with other projects at collaborative events, as well as combined for longer Planets-specific events as tools and services were finalised.

A provisional programme of events was outlined for the duration of the project, alongside a significant amount of detail on how the event activities would be documented and evaluated. The planned programme adopted the approach of initially delivering short Planets sessions as part of more general digital preservation training events, whilst Planets tools and services were still in development, in order to educate institutions throughout Europe in the general principles of digital preservation and to raise awareness of the project. More detailed Planets events would then be organised towards the end of the project. This would allow the research outputs and the tools developed by the project to be presented to interested members of the public at a point where these outputs had reached a relatively stable stage

¹ <u>http://www.planets-</u>

project.eu/docs/reports/Planets_DT6_training_plan_ _final.pdf

of development when their value could not only be described but also demonstrated.

The project proceeded to deliver a number of joint events during years two and three of the project, as part of collaboration with the FP6 Digital Preservation Europe ('DPE') and Cultural, Artistic and Scientific knowledge for Preservation, Access and Retrieval ('CASPAR') projects, and including training on Planets and its initial results. As the project entered its final year, the original training plan was then refined and extended² to offer a series of Planets-specific outreach and training events with supporting online materials.

EARLY ACTIVITIES – THE COLLABORATIVE APPROACH

The aim of the early training activities was not only to deliver training events on the Planets approach, but also to embed the training into the wider digital preservation education initiatives of other FP6 and European digital preservation projects.

With the establishment of the wePreserve³ consortium, initiated by the DPE, Planets and CASPAR FP6 projects, Planets took the opportunity to collaborate on the delivery of a series of introductory events which covered the general aspects of digital preservation. Courses were delivered in Vilnius (October 2007), Prague (October 2008) and Barcelona (March 2009). Using its modular approach Planets was able to insert sessions about developing Planets tools into the overall programme, offering a much more appropriate form of training in the early stages of the project as tools were emerging at different stages.

The three projects also established corresponding Virtual Learning Environments (using Moodle software) which were used to provide additional pre-course training materials for attendees. After the Vilnius event, materials were displayed on one Moodle (that of the DPE project) only, in order to avoid confusion for delegates and further combine the approach to the training events.

The strategic and co-ordinated approach to early events enabled the Planets training programme to have a much wider impact on digital preservation training for the European Community. Rather than potentially restricting take-up through focusing on project-specific training for the duration of the project, Planets tools and services were instead introduced to more diverse audiences in a general context that made training more palatable and in turn fostered interest in the Planets approach. At the same time a collaborative approach to events

project.eu/docs/reports/Planets DT6-

D4_Training_Plan.pdf

did provide drawbacks; the designing of programmes that fulfilled each project's requirements was a continued challenge and prolonged the planning process significantly. The degree to which each project's results could be fully disseminated in a joint event was also limited, and as each project matured this became a more obvious issue. The original anticipated need for detailed project-specific training was therefore confirmed as Planets moved towards completion.

THE 2009-2010 TRAINING EVENTS AND ACTIVITIES

Whilst the collaborative training events proved successful, it was equally clear that there was a need, particularly amongst the growing Planets User Community, for more courses dedicated to the Planets approach. Outreach and training efforts within Planets had heretofore been viewed as discrete resources, but after the delivery of a highly successful combined outreach and training event, focusing on preservation planning using Planets tools, in Vienna in April 2008, it was agreed that effort between the Planets training and outreach services should be combined for a final series of events dedicated to introducing the now more complete Planets approach to the core target audiences.

Five outreach and training events were planned during the fourth and final year of the Planets project. Locations for the 2009-10 events were carefully chosen in order to reach as broad a range of European countries and contexts as possible, and the events were publicised through the extensive network of digital preservation, archive and libraryrelated mailing lists across Europe. Each event placed a target on attracting at least seventy percent of participants from the local region, and promoted the event through regional contacts and organisations.

The first event took place in Copenhagen, Denmark in June 2009. This was followed by Sofia, Bulgaria (September 2009), then Bern, Switzerland (November 2009), London, England (February 2010) and finally Rome, Italy, in April 2010. The training team carried out initial research into the level of digital preservation activities within each region of Europe, in order to tailor courses to their anticipated audience. A pre-event questionnaire was then distributed to delegates prior to the event and the results disseminated to speakers, to ensure individual sessions were pitched correctly. The work identified that knowledge and activities in Southern and South Eastern Europe were less advanced than those in Northern and Western Europe, and so the Sofia and Rome events had a different regional focus to those of Copenhagen, Bern and London.

² http://www.planets-

³ <u>http://www.wepreserve.eu/</u>

Each event consisted of an initial day of highlevel explanation of the challenges of effective digital preservation, along with an overview of Planets solutions to these challenges: this initial day was targeted at managers, budget-holders, policy-makers and other senior decision-making members of staff.

Days two and three consisted of a mixture of lectures on more detailed technical information about the Planets tools and services, interspersed with practical demonstrations of the tools working live and opportunities for open discussion. These two days were aimed at librarians, archivists, and the technical and developer staff who would be involved in the implementation and maintenance of Planets tools, should they be adopted by their institution.

Each event also incorporated one or two guest speakers who gave a more personal account of either region-specific digital preservation concerns, or a case study of how they had tackled the digital preservation issues, very often using Planets tools and services within their institution. Speakers from institutions such as the Central European Library, Bavarian State Library, Bibliotheque Nationale de France and UK Parliamentary Archives discussed their experiences alongside Planets partners from the National Library of The Netherlands and the Swiss Federal Archives.

Alongside the training events, HATII also led the development of a suite of online training materials, both to complement the learning of those who had attended one of the year four courses, and also to introduce the principal concepts of the Planets approach to digital preservation to anyone unable to attend the face-to-face training. The use of materials on the Moodle sites for joint events had been lower than anticipated, with feedback suggesting neither delegates or tutors had sufficient knowledge of the software or time to familiarise themselves with how to use it correctly. The Copenhagen event trialled placing supporting materials on a Planets webpage, which was well received, and as a result the decision was made to use a dedicated area of the Planets website for dissemination of final online training materials instead.

These materials were made freely available online at the close of the fifth and final 'Planets Way' event, and consist of seven short videos, based on day one presentations, plus an annotated reading list and a set of summaries of the first day outreach material prepared by IBM (one of the Planets industry partners) for technical and development staff. This material is currently hosted on the Planets website, though this may change due to future activities of the Open Planets Foundation (OPF). This not-for-profit organisation has been established at the end of the project in order to continue the development and support of the Planets tools including training for interested organisations.

FEEDBACK

After each 'Digital Preservation – the Planets Way' event, delegates were asked to complete a feedback form, scoring various aspects of the course and also providing comments on what they liked best about the event and what could have been done better. The delegate feedback from each event was carefully gathered, monitored and integrated into planning for the next event in the series.

The events were well attended, with three out of five exceeding attendance target for all days, namely fifty delegates for day one and thirty for days two and three. The regional focus for events was also successful, with four out of five reaching the target of seventy percent of attendees being from local countries. A good proportion of attendees were however from a range of countries outside Europe, including the USA, Australia, and Saudi Arabia. Despite efforts to attract delegates from all regions of Europe the countries of Southern and South Eastern Europe were still underrepresented across the series, reflecting the lower level of involvement in digital preservation activities or perhaps a reluctance to attend events delivered in English.

Delegates represented a wide variety of national libraries, national archives, academic and government institutions. and within these organisations the target job functions of librarians, archivists. CEOs and IT staff were well represented. alongside digital preservation researchers.

The feedback to a set of event and organisational criteria was consistently high across the events (Figure 1), with many areas improving as the series developed and trainers listened to the comments of attendees. A target was set for seventy percent of delegates to rate events as good or better against criteria. The courses' success in providing a good introduction to Planets and meeting expectations were particularly highly rated and a significant majority would consider using Planets and attending similar events in the future. The areas which received the lowest average scores were enabling delegates to understand approaches and the gaining of practical skills, but even these remained close to target. The various organisational aspects of the events also received excellent feedback, with the speakers and content of sessions highly praised, and pre-event reading and the content of exercises generally performing less well.

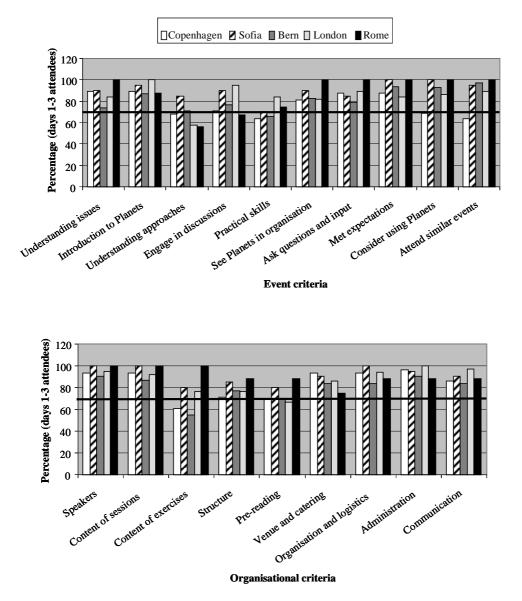


Figure 1. Feedback across the series.

In the feedback form, participants were asked to rate each lecture individually, and the ratings and comments were carefully examined by speakers in order to improve individual sessions. For the overall average rating of all the lectures in each event (Table 1), excluding Sofia the rating was constantly improved, reaching very high levels.

	Avg rating	Std deviation
Copenhagen	4,05	0,32
Sofia	4,47	0,16
Bern	4,09	0,27
London	4,23	0,17
Rome	4,25	0,17

 Table 1. Average rating for lectures.

The standard deviation, which indicates how much on average the individual lectures are above or below the overall value, decreased from the first to the last event, indicating that not only did each lecture improve over time, but also the difference in rating between each lecture gradually reduced.

In addition to scoring various criteria for the training events, delegates were invited to provide general comments on what they liked best about the event, what they would like to see in future events and what they thought could have been done better. General consensus across the series was that the practical exercises were a favourite part of the events, as well as the opportunity to network with other attendees and the knowledgeable speakers. Delegates would have liked to have seen more examples of Planets being used in an institutional setting, a clearer explanation of how the tools fitted together, and more opportunity to use tools individually during the exercises.

The comments on what could have been done better highlighted the difficulties of satisfying

audiences with a variety of job roles, institutional contexts and digital preservation knowledge. Delegates requested differing levels of introductory information on digital preservation, and whilst some commented the technical level of the event was too low, librarians and archivists in particular tended to suggest it was too high. This conflict of opinion supported other comments which indicated that some areas of the events should distinguish between information needed for librarians, archivists and managers, and that required by IT professionals or developers. Several delegates also commented that the events tried to fit too much information into a three-day course, suggesting that courses tailored to more specific audiences may go further in addressing the specific needs of target groups.

Other methods of feedback were also used and valued by the organiser team, including spontaneous suggestions on the part of the audience which the organiser team used and carried on to further events. For example, the use of Twitter was initiated by a delegate at the first event in year four, in Copenhagen. This delegate created a hashtag ('#Planetsway') in order to identify Twitter messages specifically about the Planets event. In subsequent events of the series, the organiser team encouraged delegates in both the use of Twitter for feedback and that specific hashtag.

Blogs were also useful pieces of evidence after each event. At the end of each event, feedback from Twitter and the blogosphere was searched for and included in the evaluation process. Blogs that posted entries about the year four events include Archives Hub blog⁴, the KeepIt project's 'Diary of a Repository Preservation Project'⁵ and the Bodleian Library's FutureArch blog⁶.

IMPACT

At the end of the series of 2009-10 outreach and training events, a post-event survey was conducted. Feedback from each event had routinely shaped the content and format of subsequent events throughout the training, but to truly judge the success of the training programme, it was important to gather information about the real impact the programme had had on its attendees' working practices and in turn the national library and archive and digital preservation communities of Europe.

The survey attempted to find out two things; firstly, the extent to which delegates had implemented the knowledge and skills they had gained on the course, and secondly, whether the events had led to any collaborations or increased involvement for delegates in digital preservation forums or Planets activities.

A questionnaire was designed with a set of yes/no questions asking for further description where required. The questionnaire was issued to all known attendees of the training courses across the programme (excluding Rome which had not taken place at the time of the survey), which totalled 339 individuals. A small prize was offered as an incentive for delegates to respond. Seventy delegates responded to the questionnaire (some partially), giving an overall response rate of twenty-one percent. The percentage of responses for each event against the number of attendees varied, with early events often as well represented as later courses.

Three questions were asked focusing on the implementation of knowledge and skills. The first asked whether since attending the course delegates had gained knowledge and/or skills which they had been able to implement in their work. Fifty replied that they had, with only four claiming they had not. Some responses commented that the event had helped them to understand the general issues surrounding digital preservation, whilst several specified migration and emulation, significant properties and preservation planning as skills which they had been able to implement. A number stated that nothing had yet been implemented as they were not at that stage within their organisation, but that the training had helped them understand how to approach the issue; as one delegate responded: "We are in the process of creating strategies for preservation and Planets has given me awareness about tools and services that I can use to achieve that".

The second question inquired whether as a result of attending the course delegates had introduced, or anticipated introducing, new activities/initiatives in their organisation to preserve digital content. Thirty-nine delegates concluded they had, specifying a variety of activities including attributing metadata and significant properties and general digitisation. One delegate commented that whilst existing initiatives in their organisation had stayed the same, "Planets does provide useful tips and methodologies to improve the effectiveness of those".

The third and final question in this category considered whether delegates' organisations had implemented, or intended to implement, any of the Planets tools and services. There were an almost equal number of positive and negative responses to this question. General consensus seemed to be that many were planning to but had not yet done so, and in some cases were just beginning initial testing with some of the tools. Out of twenty-seven positive responses, thirteen specifically named

⁴ http://archiveshub.ac.uk/blog/?p=6

⁵http://blogs.ecs.soton.ac.uk/keepit/2010/02/16/pla nets-way-london-highlights/

⁶http://futurearchives.blogspot.com/2010/02/musicplanets-and-secret-messages.html

Plato and/or the Testbed as services they planned to implement.

The second part of the questionnaire asked five questions about delegates' involvement in the digital preservation community and with Planets in particular. The first asked if any collaborations or working relations had been established as a result of attending a Planets course. Twenty-six delegates specified they had, in particular citing continued contact and sometimes even collaboration with speakers, and partnerships or collaboration with other institutions who had attended the course. The second question asked if delegates had become involved in discussions about issues raised in the course through discussion lists or forums. Only thirteen responses stated that they had, listing discussions with colleagues on a local level as well as following discussions through mailing lists and forums. The responses to both these questions demonstrated the importance of the face-to-face aspect of the programme and its role in encouraging networking and in fostering the of digital development the preservation community.

The next two questions asked whether delegates had participated in any further digital preservation training or Planets dissemination activities since attending the course. A relatively low number of positive responses were received to both of these questions, suggesting it might be useful to place more emphasis on attracting previous delegates to any future events. Further training and dissemination activities listed included other Planets and digital preservation project events, various local workshops and the Planets community and newsletter.

The final question asked whether attendees or their organisation would consider subscribing to Planets technology or becoming a member of the Planets project follow-on organisation, the Open Planets Foundation (OPF). Forty-three respondents answered that they would consider this, with only ten specifying no. Comments indicated that in order to decide the advantages of joining would need to be weighed against the costs of subscription.

The post-event survey confirmed that the Planets training events had had a long-term impact on delegates' preservation activities within their organisations, in particular providing them with the skills necessary to tackle the issue of digital preservation and to implement new activities as a result. There was a continued interest in the Planets tools and services, with organisations already testing components and interested in the work of the OPF. The events were also significant in encouraging networking and long-term working relationships. Perhaps where the events had less impact was in encouraging delegates to become involved in other digital preservation and Planets activities. This suggests further effort should be dedicated to promoting future activities with previous attendees who will already have an interest in and understanding of the tools and services on offer.

CONCLUSIONS AND RECOMMENDATIONS

The Planets project delivered a successful training programme which reached a significant number of delegates throughout Europe and the rest of the world. The experiences and feedback from the programme offer a number of recommendations for future digital preservation training programmes which the project has identified:

Personalise courses for different occupations and geographical regions – the feedback from the events demonstrated that different audiences require different levels of training. Future training programmes should consider offering separate events for different occupation types and regional areas to ensure that the level of training is precisely suited to its audience.

Use alternative approaches to generate interest in countries less involved in digital preservation – despite efforts events were predominantly attended by countries already active in digital preservation. Further investigation into the most useful types of digital preservation training for regions underrepresented at events should be considered.

Encourage opportunities for collaborative training events – the joint training activities were an excellent way of raising awareness of what the project can offer to a broader digital preservation community. Many attendees have gone on to test and implement various tools within their own institution as a result of learning about early project developments.

Place an emphasis on practical sessions and reallife examples – delegates consistently praised the practical element of events and requested more hands-on activities and case studies to place theory into context.

Use face-to-face training events – attendees emphasised the opportunity to share ideas with other delegates and speakers in person as one of the highlights of their experience. Events support broader outreach activities and help to build a community receptive to subsequent project developments.

Develop effective online training facilities – the potential of online training is substantial as it is able to both support physical events and educate individuals unable to attend courses. The design of effective training tools however requires significant consideration and investment in order to ensure they are useful.

Use effective planning and evaluative procedures – the constant reassessment of the training programme ensured its success.