Training Plan

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Executive Summary

This report is the first iteration of the SCAPE training plan. The objectives of the Training work package are to reach over 200 participants through face-to-face and online training activities to help them understand both the business and technical aspects of the project and its approach to solving them. The training work package will also align with the Dissemination and Promotion of Best Practices, and Sustainability work packages to contribute to the dissemination of the project outputs, including guidelines and best practices, at technical, operational and strategic levels.

The Training work package will adopt the Biggs and Tang approach to learning. It will first identify the topics on which we wish to train the audiences and define the intended learning outcomes that the audience should achieve. Next, the learning activities will be developed and appropriate delivery methods will be chosen. These include large classroom teaching and small group training.

A 'training opportunities' analysis survey was issued internally to identify the topics on which the project will offer training, the target audiences, the pre-knowledge they will need, the learning outcomes for the training, the delivery methods and the time scale the training materials will be available. A selection of external training needs documents was also reviewed. The key message across found in both the internal survey and the external review is that the priority audience for training events are practitioners who need practical digital preservation skills. The findings also showed that small group training is the preferred training method.

The first face-to-face training event will take place in M23, December 2012. Further events are planned in M32, September 2013; M34, November 2013; M38, March 2013; and M40, May 2014. There will also be one-day events in collaboration with digital preservation organisations, other FP7 projects and in conjunction with major digital preservation conferences.

To ensure consistency across events, each host organisation will produce an event plan to detail the organisational and logistic aspects of the event. Attendees will also be asked to complete a feedback survey after each event which will contribute to adjusting and improving subsequent events.

Further iterations of the Training Plan will be produced in M30 and M36.

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1   Introduction

This report outlines the objectives of the SCAPE training work package as described in the description of work and focuses on the key target audiences, the approach that the training programme will take in order to deliver both face-to-face and online training courses and the materials and plans how they will be evaluated.

2   Objectives

The objectives of the SCAPE Training Programme are to:

- Establish a critical mass of potential users and business partners who understand both the business and technical aspects of the problems that the project sets out to solve as well as the approach that it has developed.

- Contribute to the successful and sustainable take-up of project outputs at technical, operational and strategic levels.

- Disseminate the guidelines and recommendations through best practice seminars.

The Training work package together with the Dissemination and Promotion of Best Practices and the Sustainability work packages, form the Take Up sub-project. These work packages aim to raise awareness of the technology developed in SCAPE at a project level, and at a wider community level, targeting people who will actually use the tools and adopt best practice methodology and contributing to the sustainability of the project results.

The description of work outlines the specific goals of the Training work package:

- **Overall awareness** of the purpose of digital preservation, the various approaches and the risks attached to inaction – for smaller memory institutions and the business community;

- **Management training** for those planning to implement SCAPE solutions in their organisations and for increasing awareness and fostering empowerment related to preservation issues in their local communities;

- **Technical training** on the SCAPE platform and tools, including specialist training for technical staff seeking to incorporate their own workflows and existing tools in the SCAPE environment;

- **Operational training** for those who will be using SCAPE tools and services;

- **Specialist/supplier training** for business-partners developing their own SCAPE-compatible preservation tools and enhancements or supporting SCAPE as part of a larger preservation system

- **Collaboration** with national digital preservation coalitions and with other digital preservation projects in FP7 to coordinate and optimise training efforts.

2.1 Scope

The work package is divided into three tasks:

- Task 1 - development of the Training Plan
  - M10-12 Identify target audiences
  - M13-15 Conduct training needs analysis
  - M16-18 Develop training plan
  - M30 Revise training plan
  - M36 Revise training plan

- Task 2 - delivery of the Training Programme
  - M19-28 Develop initial face-to-face training materials
  - M25-41 Organise and execute a series of online support sessions
  - M22* First face-to-face training event (*brought forward from M28, see 4.6.1)
  - M32, M34, M38, M40 Hold face-to-face training events
  - M28-41 Evaluate training events and adjust accordingly

- Task 3 - co-ordination of the Training activities with other FP7 digital preservation projects and national coalitions.
  - M31-36 Co-ordination actions
  - M36 Decision on opportunities for integration with third party training
  - M37-42 Integrations with third-party materials/courses

2.2 Recommendations from the first year review

The reviewers from the SCAPE first year review panel also made the following recommendations related to the Training work package:

- Demonstrate greater integration of the work on communications, training and sustainability planning (See section 4.1)

- Investigate the possibility of collaboration with the wepreserve.eu initiative which brought together training work from a number of previous digital preservation projects (See section 5.2)

3 Training Plan (Task 1)

3.1 Target audiences

The description of work identifies five key audiences who should be targeted by the SCAPE Training Programme:

- Practitioners (those already involved in digital archives)
The term 'practitioner' can refer to a broad range of people with different roles and varying levels of technical knowledge and skills. The individual training event plans will address specific sub-groups of practitioners and will describe the typical roles, skills and levels of pre-knowledge that will be required in order to be able to participate effectively during the training course. This will also be clearly communicated in all promotional materials. The training courses will aim to address a range of practitioner sub-groups over the course of the training delivery.

- Developers (starting with the Open Planet Foundation (OPF) open source community)
- Vendors (serving both the open source and commercial markets)
- Researchers (in the digital preservation field and beyond)
- Training professionals (in digital preservation and related fields)

The partner organisations involved in the Take-Up Sub-project met for the TU Kick-off meeting in The Hague in September 2011, representing memory institutions, data centres, research labs, universities, and industrial firms. During the Training workshop these partners held a brainstorming meeting to prioritise these key audiences and also identify other relevant audiences. In addition to the key target audiences outlined in the description of work, the group also identified the following potential audiences for SCAPE training:

- General public
- Students and teachers
- Decision makers / management
- Policy makers and funders
- Institutions creating or managing large scale data
- Project partners (internal training)

The target audiences identified by this group from both the description of work, and the brainstorming sessions, in order of priority are: practitioners (a number of sub-groups with different roles and skills) developers, and researchers.

3.2 Approach

The focus of the training programme is to identify the topics of research and development that the project wants its audiences to learn about, and select the most appropriate methods to help them achieve this. To ascertain this information, a 'training opportunities' analysis survey was issued to work package and sub-project leads (See 3.4Training opportunities analysis).

The first step to developing training modules is to define the Intended Learning Outcomes (ILOs).

The training and assessment can then be designed and implemented to align to these outcomes.

The SCAPE training programme will use 'constructive alignment' when designing its training modules. "'Constructive' refers to the idea that students construct meaning through relevant learning activities; 'alignment' refers to a learning environment where teaching and learning activities…are aligned to the intended learning outcomes." (Biggs and Tang, 2008)

Teaching:
• Engaging the student to the verbs* in the ILO

Intended Learning Outcome:
• What the student has to learn

Assessment:
• How well the student has acheived the ILO
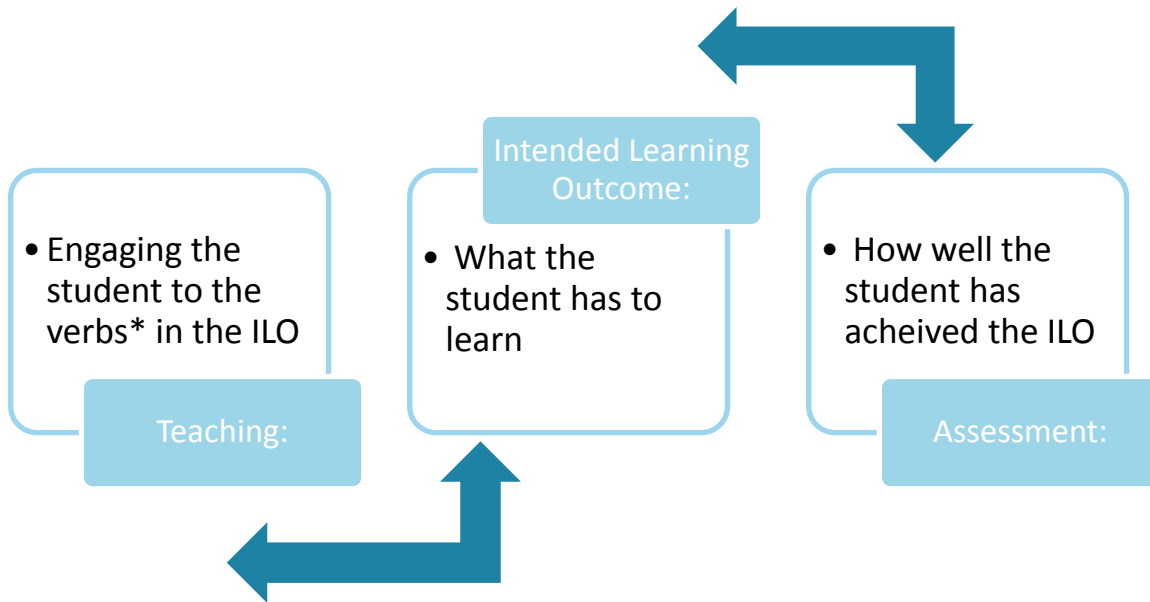
*See Appendix A – Bloom's Taxonomy (Revised version)

Figure 1 (Adapted from Biggs & Tang, 2008[1])

3.3   Intended learning outcomes

The intended learning outcomes should outline:

- Knowledge and understanding
- Intellectual skills
- Practical skills
- Transferable skills

The next step is to identify suitable teaching and learning activities to deliver the intended learning outcomes. The SCAPE description of work suggests that at least two methods of training delivery are used. Figure 2 addresses some of the training methods that could be used in face-to-face training events, how the activities are delivered and their advantages and disadvantages:

Method	Teaching Activities	Learning activities	Advantages	Disadvantages
Large group classroom teaching	Talk, explain, clarify, demonstrate	Listen, take notes, accept, query, discuss with peers	Convey a lot of information to many attendees Minimal number of trainers required	Low interaction and feedback Assumes attendee understanding

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[1] http://www.slideshare.net/DianaMQuinn/john-biggs-and-catherine-tang-2008-presentation

| Small group training - hands-on | Explain, support, facilitate | Distinguish, identify, plan, analyse, evaluate | Gain practical experience | More training resources required - 1 trainer per 6 attendees

Significant effort needed to develop hands-on exercises |
|---|---|---|---|---|
| Case study / Scenarios | Discuss, demonstrate | Analyse, apply | Engages attendees in active learning

Attendees can apply learning to own organisation | Case study may not be relevant to all attendees |

Figure 2: Training methods

The SCAPE project will offer a range of learning activities to best deliver the different intended learning outcomes. For example, there will be large group classroom teaching and demonstrations to explain the SCAPE project and to provide a context for the practical sessions. There will also be practical exercises to provide the attendees with experience of using the tools and applying them in different scenarios.

Other training methods which could be used when considering the best way in which to deploy the activities to meet the intended learning outcomes could include:

- Speaker panels
- Facilitated discussions
- Brainstorming sessions

These could be used in conjunction with, or to support the methods listed in figure 2.

3.4   Training needs analysis

The SCAPE training programme will introduce the concepts and the real solutions that the project has to offer. It will help the audiences to learn about the types of problems that can be addressed by using the SCAPE methods and solutions and how they can be applied.

The training programme will not be able to solve the problems of each participant. It aims to inspire people to learn how to recognise the issues they have with their digital collections and how to think about solving their problems.

In order to identify the training modules that the SCAPE training programme will deliver a 'training opportunities' analysis survey was issued internally on 29 March 2012. Responses were due by 20 April 2012.

They were each asked:

1. What are the key outputs from your SP/WP for the Training programme? Please describe the tool/service/topic/deliverable.

2. Who is the target audience for your tool/service/topic?

3. What level of pre-knowledge is required from the audiences?

4. Which goals of the Training work package will this address?

5. What will be the learning outcomes for the audiences?

6. Which methods of training will be best for the tool/service/topic?

7. Which project month will they be available for training?

8. Who will deliver the training module / assist with the online materials / main contact? (Is an external trainer suitable?)

The majority of work packages completed the survey, although some only provided a high-level summary and there were some gaps. Several work package leads indicated that it was too early in the development process to be able to provide a detailed level of response at this time.

Of the 15 technical work packages, TB.WP.4 (Evaluation of Results) responded to say that their work package is not relevant for training, and TB.WP.5 (Demonstrations) does not begin until M25. Responses are pending from two additional work packages (PC.WP.3 Quality Assurance Components and TB.WP.2 Large Scale Digital Repositories Testbed). Responses are also pending from the non-technical work packages TU.WP.1 (Dissemination and Promotion of Best Practices) and from TU.WP.3 (Sustainability) as their work is still being carried out and it is too early to provide a detailed response at this stage in the project.

The overview of the survey results below is a summary from the 11 technical work package responses:

Q1 & Q5. What are the key outputs? What will be the learning outcomes?
The responses to what the key outputs of the work package and what the associated learning outcomes will be varied by work package. These responses have helped to inform the initial programmes as outlined in [section 4.6](#)

Q2. Who is the target audience?
Ten work packages identified practitioners as one of their target audiences, nine identified developers, and seven identified researchers. Two work packages also indicated vendors were a target audience that could be addressed, and one work package replied that partners and training professionals would be relevant audiences.

Q3. What level of pre-knowledge is required?
For practitioners, the level of pre-knowledge required to undertake training included: an understanding of key concepts of digital content, renderability, formats, preservation capabilities and information systems. Responses also indicated that PREMIS and OAIS, as well as an understanding of REST would be helpful; basic knowledge of using Unix, the Linux command-line, and Taverna will also be needed. Developers will need programming language skills and development experience with

technologies such as Java, Hadoop, and Stratosphere. For research related training an understanding and interest in laboratory operation and informatics, distributed service and system integration was outlined as the level of pre-knowledge.

Q4. Which goals will this address?
Ten of the respondents cited that they will meet the goal to deliver technical training on the SCAPE platform and tools, including specialist training for technical staff seeking to incorporate their own workflows and existing tools in the SCAPE environment. Five will address the operational training, and give the specialist/supplier training, while two responded they will address the overall awareness and two management training. It is noted that these responses only currently reflect the technical work package responses and that the best practice seminars and outputs from the Sustainability work package will mainly contribute to the overall awareness and management training goals.

Q6. Which training methods will be best?
Initial responses to the types of methods that would be used to deliver the training modules showed that of the 11 work packages, ten thought practical exercises would be employed as a learning method, eight said presentations, six would use demonstrations, four suggested case studies or scenarios, two would consider facilitated discussion sessions and other methods included a hackathon approach, and brainstorming sessions. There were also a couple of mentions of online training including webinars and screencasts.

Q7. Which project months will the materials be available?
The responses indicated that the training session material would mostly be available from M24, January 2013, though some have material that can be used now, and the majority of material will likely be available towards the end of 2013 – beginning of 2014.

Q8. Who will deliver the training?
The work package leads thought that the training would be carried out by the project consortium partners, although not all were clear as to whom in their work package would be responsible for this as yet.

These responses help to inform the approach and structure of the Training Programme and its timeline. As more information becomes available, these responses will be refined into 'Session Plans' for each training module as per the example in Appendix B – Session plan example, which will outline the intended learning outcomes as per the approach in section 3.3, and the relevant training methods that will help the attendees to meet them.

3.4.1   Review of external surveys
In addition to the internal analysis, a review of recent digital preservation training surveys has been carried out, rather than repeating this activity. Key findings are:

APARSEN: Report on Survey of Training Material/ Assessment of Digital Curation Requirements 2012 (desk research)
- 74 digital preservation training initiatives (consisting of 22 training courses, 31 workshops, 2 tutorials and 19 on-line courses have been held between 1 January 2010 and 1 January 2012.
- The main topics covered by these courses were: digital preservation general concepts (55); digital object management (51); digital curation tools (37); legal aspects and preservation

policies (28); preservation strategies (24), strategic planning for digital preservation (22); audit and certification (17).

- The majority of these training courses were held in the UK or USA

Digital Preservation Outreach and Education (DPOE) Training Needs Assessment Survey[2]
2010 (868 responses. 40% of the respondents were libraries, 34% were archives, 16% were museums, 4.5% were historical societies and 0.9% were research groups.)

- 65.9% of organisations can fund attendance for staff at digital preservation training activities
- The highest training need for staff was identified as technical training to assist practitioners in understanding and applying techniques
- The training methods thought most effective were, in order of priority: (in person) small workshop focused only on training, (in person) large workshop with opportunities for networking, Online, webinars.

DigCurV: Report and analysis of the survey of Training Needs[3]
2011 (454 responses, the majority of them coming from Europe.) The participants represent a broad spectrum of organisations from the cultural heritage as well as the scientific and education sectors and are engaged in a variety of activities with regard to digital preservation and curation.)

- Small group training is the preferred method of training (75.3%)
- The most popular time frame for training is a one-time event of 1-2 work days (55.3%) A one-time event of 3-5 work days was the second most popular time frame (29.8%)
- The survey recorded a considerable training need in terms of general skills, the most pressing need prioritised by respondents is for digital preservation-specific and technical skills

These findings show that many existing training courses focus on providing a general overview of the issues of digital preservation. While this is important, and is one of the objectives for the training plan, the findings in both the internal and external surveys reinforce the message that the **priority audience for training events are practitioners who need practical digital preservation skills**. The SCAPE training programme will focus its efforts on delivering this, rather than delivering another general overview to managers. The findings also indicate that **small group training** is the preferred training method, which will be considered when activating the intended learning outcomes.

3.5   Assessment and Evaluation

The attendees will be asked to complete a feedback survey (see Appendix C – Feedback Survey), which will be available online through the Survey Monkey website and paper copies will also be provided to gain the maximum number of responses. The purpose of the feedback survey will be for the attendees to assess how well the training activities helped them to achieve the intended learning outcomes. It will also ask them to evaluate the organisational aspects of the event.

The feedback will be collated and written up after each event in an evaluation report by the host organisation, together with input from the work package lead, to review the delivery of the training event and to make recommendations as to how the future events can be improved. It will then be distributed to the speakers and trainers of the current event and the other host organisations for consideration when developing their event plan.

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[2] http://www.digitalpreservation.gov/education/background.html
[3] http://www.digcur-education.org/eng/Resources/D3.1-Training-needs-survey-summary-report

3.6 Key performance indicators

The SCAPE training programme will aim to:

- Attract over 200 people to attend a training event in person or undertake training activities online over the course of the project
- Attract 20-30 people to each two-day face-to-face training event
- Attract 20-30 people to each one-day face-to-face training event
- Have six-eight attendees to one trainer for small group sessions
- Have at least 50% of feedback forms completed by attendees for each training event
- Achieve 70% or above 'good' or 'excellent' ratings for organisational aspects

We believe that 30 attendees is the maximum number of people that the SCAPE project can deliver training to in an effective way. This is based on the approach used by the Planets project for the practical training sessions, and also other European projects as well as workshops organised by the Open Planets Foundation, Digital Preservation Coalition, and the JISC-funded AQuA and SPRUCE projects.

3.7 Schedule and Budget

We believe that two-day and one-day events are more effective than longer events, and the external review of training indicated that shorter training events are also preferable to the organisations of the potential attendees.

The description of work defines a suggested training schedule of delivering five three-day events, five one-day events, and 20 hours of online training materials. Based on the training delivery experience from SCAPE consortium partners and the results of the external survey, we plan to alter the delivery schedule to address these findings and will deliver one three-day event, four two-day events and five one-day events (amounting to the total of 16 days of training rather than the envisaged 20 days). We will aim to compensate for this difference with more online training. In addition we will seek opportunities to deliver the one-day workshops and training at external conferences as this will help to keep costs down as well as reach a wider audience. We will also work in collaboration with other FP7 projects and digital preservation organisations as part of Task 3, Co-ordination and Integration.

The two-day training events will be held at partners' institutions where possible, or at venues where a discounted rate can be negotiated. Delegates will be charged a fee to attend. Costs will vary subject to the location, but the estimated cost to attendees will be €150, which will cover catering, room hire and equipment hire costs. An example budget for a two-day event can be seen in Appendix D - Budget.

4 Training Delivery (Task 2)

4.1 Marketing and communications channels

In order to raise awareness about the Training Programme activities the work package will engage with the Take Up and Promotion of Best Practices (WP 20), as recommended in the first year review. The objectives and activities of the SCAPE communication plan, D20.2, are closely aligned to those of the Training Programme:

- to inform all interested parties of project development and results in the best suitable way.
- to raise awareness about the project itself and project results.
- to enable involvement of external developers in the community-based open-source development of SCAPE-related products.
- to establish a fruitful engagement with other projects and programmes.

The Training Programme events will be communicated through the channels established by WP 20:

SCAPE website: The dedicated page for SCAPE training events will be used to announce the date and locations of events, outline the programme of each event, provide links to pre-reading and online training materials and to feedback forms.

Twitter: The SCAPE Twitter account and hashtag (#SCAPEProject) will be used to announce the training events and release of materials, and in addition, attendees will be encouraged to tweet during the events so people who are unable to attend can follow the events online.

OPF Blogs: The OPF blogs, which also feed the front page of the SCAPE website using the SCAPE tag, will be used as a channel to promote the events, and attendees at the event will also be encouraged to write a blog about their experience at the event.

OPF Wiki: The SCAPE Training activities will also have a page on the public SCAPE section of the wiki, which has established an active practitioners and developers community.

Mailing lists: The SCAPE newsletter and technical mailing list will be used to announce training events. The announcements can also be disseminated through the OPF community mailing list (which was established during the FP6 project, Planets, and now has over 700 subscribers) as well as through other popular digital preservation community lists, online magazines and calendars, including JISCMAIL. Where possible, the SCAPE announcements will also be disseminated.

Conferences: Announcements about future events will also be disseminated at conferences where SCAPE partners have papers submitted, or are running workshops, for example, IPRES.

The Training Programme will also produce a promotional flyer which can be handed out at events and conferences.

4.2 Organisation

In order to deliver the training activities in a timely and consistent manner, each host organisation will write an event plan. The event plan will outline:

- the dates and location of the event
- the number the available rooms and their facilities (seating arrangements, wifi etc.)
- the budget (room hire costs, technical equipment costs, catering costs)
- the target audience, programme and speakers
- the organisational and logistical point of the events (nearby hotels, travel to the venue, event dinner)
- the communication plan (announcements using the channels described in section 4.1.

An example timeline of organisational and promotional activities chart has been created in Appendix E – Timeline. The event plan should use or adapt the timeline and its activities to ensure consistency across the event.

The programme for each event will be led by the event topic work package lead or representative with support from the host organisation and the Training work package lead. They will define the intended learning outcomes and training delivery methods and formulate the session plan and overall agenda for each event. They will also further clarify who the target audience is for the event. This information will feed into the event plan.

The Training work package lead, supported by the trainers and host organisation, will write an evaluation report after each face-to-face training event, based on the attendees' evaluation survey.

4.3 Effort

In the 'training opportunities' analysis survey, most training sessions have supplied a main contact point for training delivery, however, not all of the training sessions have sufficient effort in the training work package. Effort from Research Technology Development (RTD) work packages can be used for development and delivery of training materials. In addition to this, the training events will seek to hold train-the-trainer sessions in advance of the training events incorporating them with other internal meeting where possible, so that delivery of the training is not reliant on one person or organisation, and there are enough trainers on-hand at the event to facilitate small group sessions and practical sessions. This will also contribute to internal training for consortium partners, especially those who have a large amount of effort in the Training work package.

4.4 Registration

Each host organisation will be responsible for their event registration. The registration fees will go directly to the host organisation to cover their costs. Any surplus must be returned to the project. Delegates must pay their registration fees in advance to be guaranteed a place.

It is recommended that host organisations use an online service such as Eventbrite (https://www.eventbrite.co.uk/). Eventbrite can be linked to the SCAPE project website and Twitter feed, and can be consistent with the SCAPE branding. It can also enhance events, and therefore SCAPE, in the Google search results. Projects such as the JISC-funded AQuA and SPRUCE have used this site with positive results. It accepts payment by credit card, Paypal, Google checkout and by invoice. Fees vary depending on the method.

4.5   Training events and activities

4.5.1   Developer Meetings and SCAPE Scenario Workshops

From the beginning of the project, the partners have recognised that face-to-face meetings are an important part of working as an internationally distributed team, and internal project partners were also identified as an important target audience for the SCAPE Training Programme. In addition to the annual all-staff meetings, the Training work package has worked closely with the Technical Co-ordinator, to run cross-project developer meetings and SCAPE Scenario Workshops.

The first internal developer meeting took place in Vienna, Austria on 6-7 June 2011. The agenda for this meeting was to ensure that the developers were familiar with the main parts of the SCAPE platform, particularly Taverna and Hadoop+HBASE, and to propose the initial tool integration plan. This plan defined how the PC (CC, PA, QA) tools should be prepared so that they are well-integrated with the other SCAPE components.

Building on the developer meeting, the project then held the SCAPE Scenario Workshop, hosted by KEEPS, in Braga, Portugal on 1-3 February 2012. The goals of the workshop were for the partners to gain a better understanding of the scenarios, assess the status of the solution prototypes and further define that outputs that SCAPE will produce and how they will be evaluated. By the end of the three-days, the participants had developed demonstrations in four areas: deep JPEG2000 validation, web archive characterisation, quality assurance of image collections and tool packaging and installation. Brainstorming sessions helped to fill in the gaps in the datasets, issues and solutions documentation.

Further workshops will be held twice a year over the course of the project. Initially the workshops will be internal training events, but it is planned to open them externally as the project progresses to engage both the practitioner and developer communities to see demonstrations and gain hands-on experience of using the tools and best practice methodology. The SCAPE project also benefits from continuous feedback to feed into development iterations. External attendees will be asked to pay a fee to cover catering and equipment costs. The costs for consortium partners will be paid for by the host organisation as per the agreement about internal meetings.

4.6   Face-to-face training events

The SCAPE Training work package will deliver one three-day event, (comprising one day open to the public followed by a two-day training event. See section 4.6.1) four two-day and five one-day face-to-face events.

The dates of delivery are consistent with the suggested dates in the description of work with the exception of the first event which has been brought forward from M28 to M22 so as to take advantage of the opportunity to deliver an event in collaboration with the European Capital of Culture 2012.

The locations listed below have been agreed, however the order in which training will be delivered at these locations is subject to change as the session plans are refined and there is more information about the training materials available, and the resources available at the host organisations.

The content of the training events below is informed by the responses received so far to questions 1 and 5 in the 'training opportunities' analysis survey. These initial programmes are also subject to change as further information becomes available and the pending responses from both the technical and non-technical work packages are received.

4.6.1 SCAPE Training Event: Sustaining Digital Culture 2012

Location: Guimarães, Portugal
Host Organisation: KEEPS
Date: End November / Beginning December
Duration: Three days
Attendees: Day one, general public: 50
Day Two and Three: 25-30
Audience: General public, practitioners, researchers (vendors, suppliers)
Background: During the early months of the project, KEEPS established a relationship with the Fundação Cidade de Guimarães, the entity responsible for designing, carrying out and promoting the Guimarães 2012 European Capital of Culture project. They were keen to include digital preservation on their programme of activities and offered the SCAPE Training work package a training venue free-of-charge, as well as publicity and promotion for the event.

This opportunity means that the project can engage with another of its target audiences, the general public. Initial ideas for the agenda include the preservation of the Guimarães 2012 European Capital of Culture project website, a personal digital preservation day (http://www.digitalpreservation.gov/personalarchiving/), hosting a panel for discussion with digital artists. The second two days will be for practitioners, developers and researchers and will be focused on SCAPE.

This event could run in parallel to a SCAPE Scenario workshop, meaning that there will be the possibility to have a larger number of trainers present at the event to facilitate the public activities.
Day one topic: Sustaining Digital Culture 2012 (personal archiving day)

Day two and three topic: Keeping Control: Scalable Preservation Environments for Identification, Characterisation and Validation
Work packages: PT.WP1, PT.WP2, PT.WP3, PT.WP4, PC.WP1
This training course will cover elements dealing with scalable identification, characterisation and validation of large collections of varying file types. Users will be introduced to a number of tools designed for each of these purposes and involved in problem solving scenarios. Further, users will be required to evaluate the use of scalable and cloud based technologies in developing solutions for given scenarios.

- infrastructure and application provisioning
- identification & characterisation tools
- Taverna and parallel workflows
- identification & characterisation tools on Taverna

A best practice seminar addressing migration in large scale digital repositories could also be featured in this event.

4.6.2   SCAPE Training event: Future Formats First: Building Applications Infrastructures for Action Services

Location: London, United Kingdom
Host Organisation: BL
Date: M32, September 2013
Duration: Two days
Number of attendees: 25-30
Audience: Practitioners, Researchers (Vendors, Trainers, Developers)
Work packages: PT.WP1, PT.WP2, PC.WP2
Overview: This training course will introduce a large scale preservation infrastructure for preservation action. This course introduces many of the platforms and readily available applications that enable effective execution of preservation actions, both via emulated and non-emulated environments. Users will be guided through a number of key use cases for such systems, each evaluated against a number of essential criteria.

- Infrastructure and Application Provisioning
- Action Services

4.6.3   SCAPE Training event: Critical Path: Effective Evidence Based Preservation Planning

Location: Aarhus, Denmark
Host Organisation: SB
Date: M34, November 2013
Duration: Two days
Number of attendees: 25
Audience: Practitioners, Researchers, Vendors, Trainers
Work packages: PW.WP1, PW.WP2, PW.WP3
Overview: Key to all digital preservation is effective planning. Preservation policies and decisions to take action must be based on solid, evidence based planning. This training course guides users through a number of key decision points in preservation planning, demonstrating how a number of profiling, evaluation, simulation and validation components can be used to more effectively manage digital risk. Further, this course shows users how to manage preservation policies and plans such that these can be evaluated regularly as environmental conditions change and further risk has to be managed.

Preservation Planning and Watch:

- How to evaluate components using Taverna - Together with a TB scenario
- Content profiler and its feeding into Planning: Case studies
- Prototype demos how things (will) fit together (PW, PT, PC, repositories)
- Policy-aware planning and monitoring
- Life-cycle planning
- Experiences from case studies, benefits analysis
- Simulation

4.6.4 SCAPE Training event: Active Communities: Large Scale Preservation of Preservation Tools

Location: The Hague, The Netherlands
Host Organisation: KB
Date: M38, March 2014
Duration: Two days
Number of attendees: 30
Audience: Developers
Work packages: PC.WP2, PT.WP1, PT.WP2
Overview: Good Development Practice and Package Development

Lots of great digital preservation applications and services exist, however very few are actively maintained and thus preserved! This is a big problem! By introducing the steps to develop these and engage the support of the community, this training course looks at what can be done to improve this situation. Specifically, this training course looks at how to prepare packages for submission into the very heart of many digital environments; the operating system and directly associated "app-stores". Attendees will be given hands-on experience with developing and maintaining packages rather than software and key differences will be discussed and evaluated. Better preservation of preservation tools, means better preservation our digital history.

4.6.5 SCAPE Training event: Exhibit A: The Evidence for Effective Digital Preservation

Location: Vienna, Austria
Host Organisation: ONB
Date: M40, May 2014
Duration: Two days
Number of attendees: 25
Audience: Developers
Work packages: Cross-project
Overview: 5-Star Data Curation

Informed decisions rely on evidence.

There is no evidence without data analysis.

There is no data analysis without data.

This training course looks at publishing of data for digital preservation. Specifically the publishing of 5-Star Linked Data (Google: w3c Linked Data Design Issues) that can be easily shared, sliced and re-processed in order to be analysed. Through introduction of a number of key digital preservation datasets, users are guided through the process of publishing well managed data sets that scale to millions of records. Further to publication this course also addresses opportunities to re-use and align existing datasets for in depth analysis and provisioning of novel preservation services.

4.7 Online training activities

The online training activities which support the face-to-face activities are particularly important not only because there is no budget for the SCAPE training programme delivery but also because the current economic climate means that the potential attendees' organisations are facing long-term cuts in their travel budgets.

The SCAPE training programme will adapt and deploy an online training environment by M30, July 2013. A priority of this task is engaging users early on. This will be undertaken in collaboration with the other work packages in the Take Up subproject, using the communication channels available to update potential users with the development progress and updates on materials.

The online training materials will take the same approach as the face-to-face training activities. The responses to the 'training opportunities' analysis survey will be refined into session plans with specific intended learning outcomes. It will then be decided how best to deploy this learning in an online environment. Potential channels include:

- Webinars
- Screencasts
- Online support sessions
- Case study based tasks
- Quizzes

The online training environment will capture user information to measure the number of people undertaking the activities. It will also gather feedback to be measured by the key performance indicators for continuous improvement.

5   Co-ordination and Integration (Task 3)

The Co-ordination and integration task is due to start in M18, July 2012. The Take Up subproject has already made initial contact with both the FP7 TIMBUS and APARSEN projects and both parties have agreed to co-ordinate activities where possible. Further details of activities will be outlined in the next iteration of the Training Plan.

5.1   One-day events

There is also the possibility to host one-day workshops at larger events and conferences such as IPRES, PASIG, Open Repositories, JCDL, and TPDL etc. It will align with other SCAPE activities during these conferences and help raise awareness of the project and its activities.

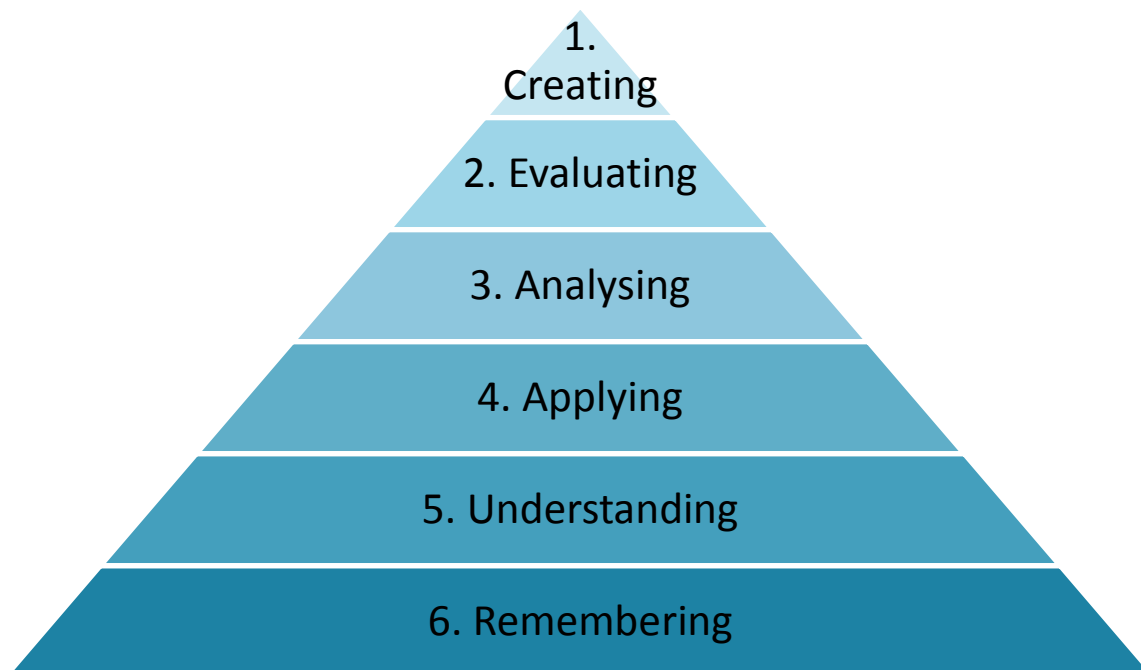### 5.2   Recommendation: WePreserve

Use of the WePreserve website was investigated and it was found that it is no longer active and has been archived at: http://web.archive.org/web/20100819054354/http:/www.wepreserve.eu/. There is currently discussion within the Take Up sub-project and the project office about what the next steps could be to address this recommendation.

Appendices

Appendix A – Bloom's Taxonomy (Revised version)

Bloom's Taxonomy is a classification of learning objectives within education. It refers to a classification of the different objectives that educators set for students (learning objectives). Bloom's Taxonomy divides educational objectives into three "domains": Cognitive, Affective, and Psychomotor. Within the domains, learning at the higher levels is dependent on having attained prerequisite knowledge and skills at lower levels. A goal of Bloom's Taxonomy is to motivate educators to focus on all three domains, creating a more holistic form of education.

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                    1.
                 Creating
              2. Evaluating
             3. Analysing
            4. Applying
          5. Understanding
         6. Remembering
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1. Can the attendee create new products, or a point of view? Verbs: assemble, construct, create, design, develop, formulate, write.
2. Can the attendee justify a stand or decision? Verbs: appraise, assess, criticize, defend, evaluate, justify, support.
3. Can the attendee judge the value of the material? Verbs: appraise, compare, contrast, criticize, differentiate, discriminate, distinguish, examine, experiment, question, test.
4. Can the attendee use the information in a new way? Verbs: apply, carry out, construct, demonstrate, operate, produce, use, employ, illustrate, interpret, operate, schedule, sketch, solve, use, write.
5. Can the attendee explain the ideas or concepts? Verbs: classify, explain, describe, discuss, distinguish, interpret, locate, recognise.
6. Can the attendee remember the information? Verbs: define, describe, identify, label, list, match, name, outline, recall, recognise, reproduce, select, state.

Appendix B – Session plan example[4]

Title of Session: Characterisation Components
Duration: 1 day
Learning Outcomes: (by the end of the session the attendees will be able to:) • Distinguish between different file types and identify the requirements for characterizing each. • Carry out a number of identification and characterization experiments on a number of example files. • Critically evaluate a number of characterization tools and advantages and disadvantages in different scenarios. • Compare and contrast the differences in running a number of characterization tools both stand-alone and within Taverna workflows.

Time:	Outline Plan/Trainer Activity:	Attendee Activities:	Resources:
08.45	Registration and coffee		
09.00	Introduce File Formats - Image/doc/multimedia and the tools to process these	Basic identification experiments (running tools on sample files)	Access to machine running all required tools
10.45	Coffee		
11.00	Discuss application of different tools to various situations	Synthesize a plan to help with a pre-defined scenario (group work, presented back)	Scenario documents
12:30	LUNCH		
13:30	Introduce Taverna		
14:30	Apply scenario solution to Taverna	Group work (part 2)	Taverna system
15.45	Coffee		
16:00	Present solution and evaluate what could be done different and how the solution scales... (the scape bit)	Discussion	
17:00	Assessment (discussion) against ILOs	Evaluate	Feedback forms

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[4] http://www.ecs.soton.ac.uk/syllabus/info6005.html

Appendix C – Feedback Survey

Question	
Name:	
Job role:	
To what extent were the learning outcomes achieved?	
What were the strong points of the event? Name at least one thing that you think worked well, or one thing that you liked about the event.	
What could we have done better? Name at least one thing that could be improved at a future event, or name an issue that you encountered during the event.	
Please rate the following aspects of event (where '1' is poor and '5' is excellent)	Organisation Trainers Venue/Catering Communication Structure
Please rate your response to the following statements (where 1 is 'strongly disagree' and 5 is 'strongly agree')	Met expectations Format delivery worked well Good balance of presentations, demonstrations and hands-on activities Found event useful/relevant to my work/organisation
Would you recommend attending a SCAPE training event to a colleague?	
Any other comments or feedback?	

Appendix D – Budget

Based on 25 people for a 2-day event:

Item	Description	Cost
Room hire	Based on €350 for a main room (up to 30-40 people, allowing for group work) per day, plus €150 for one break out room per day	€1000.00
Catering	Based on €40 per head per day (€20 for lunch, €20 coffee breaks x 3) Speakers and organisers (8)	€2000.00 €640.00
AV/Technical equipment hire	Projector, laptop, extension leads, audio, wifi	€300.00
Administration	Printing, badges, incidentals	€300.00
Eventbrite/paypal fees	Registration charges	€200.00
TOTAL		**€5640.00**

In addition to this there will be speakers and organisers travel and accommodation costs estimated at €700 each. This will be paid for by the partners' travel grant.

To support the event, a dinner could be held on the first night of each event, chargeable to attendees. It is estimated that this would cost €40 per head, depending on the location.

It is recommended to charge attendees €150.00 for a 2-day event.

Actual costs will vary between host organisations depending on the resources available to them. E.g. Some organisations will not be charged room hire costs.

Costs will vary for the first 3-day event in Portugal.

Appendix E – Timeline

Activity	Date	Responsibility
Decide dates	At least six months before	Host & WPL
Book venue	Six months before	Host
Draft event plan	Six months before	Host
Develop event programme	Four months before	Host & WPL
Draft announcements and follow-up bulletins for SCAPE mailing list & external mailing lists	Three months before	Host & WPL (co-ordinate with TU WP)
Obtain catering and equipment prices	Three months before	Host
Research local hotels, negotiate reduced group rate where possible	Three months before	Host
Research restaurants for the event dinner	Three months before	Host
Draft budget	Three months before	Host
Draft text for SCAPE website and newsletter	Three months before	Host & WPL (co-ordinate with TU WP)
Draft online registration form	Two months before	Host
Confirm speakers	Two months before	Host & WPL
Publish online registration form	Two months before	Host
Issue event announcements (website, mailing lists, Twitter)	Two months before	Host & WPL (co-ordinate with TU WP)
Book catering, dinner and technical equipment (subject to number of attendees)	Six weeks before	Host
Issue event reminder notice	One month before	Host & WPL (co-ordinate with TU WP)
Email speakers about hotel and logistics	One month before	Host
Issue final reminder bulletins	Two weeks before	Host & WPL (co-ordinate with TU WP)
Create delegate certificates	Two weeks before	Host
Close registration	One week before	Host
Confirm catering and numbers to venue and restaurant	One week before	Host
Create and circulate delegate lists	One week before	Host & WPL
Create badges	One week before	Host
Create delegate packs	One week before	Host
Upload feedback form and print	One week before	Host & WPL
Send joining e-mail to delegates	One week before	Host
E-mail final arrangements to	One week before	Host & WPL (co-ordinate with

speakers plus amended evaluation document		TU WP)
Prepare delegate registration list (special dietary requirements)	3 days before	Host
Issue post event email to delegates, send links to online materials, remind them to complete feedback forms, ask them to sign up to the SCAPE mailing list	Within 3 days after the event	Host
Email speakers to thank them for their contribution	Within 3 days after the event	Host