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PU	Public	PU
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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1 About this document

This document describes the progress made by the Learning Materials Group (LMG) in building a starting set of educational materials for the SELF Platform. The aim of building this basic collection is twofold. On the one hand, high quality materials will help attract new users to the platform and build the SELF community. Secondly, these materials will also work as seeds and examples for new educational materials.

Please Note that this document tries to present an overview of the material creation process which is a continuous and on-going task. Consequently, this document presents a snapshot of the process at the date of finishing the financed period of the SELF project (namely, July the 31st).

The collection of learning materials which is being built is composed of both existing and newly created materials. Section 2 details the process of selecting and harvesting external materials, converting them to the appropriate format and importing them into SELF.

Section 3 deals with the new materials which are being created for the SELF repository. These include the educational materials created by the UOC, a set of learning materials about the SELF platform and other materials which are being developed to address specific topics. All of these materials contribute to the filling in of the gaps already presented in the Deliverable Report D1 of this project.

The approach of the SELF project to the creation of new materials consists of being more facilitators than authors. In Section 4, the strategy to attract authors and contributors at such an early stage of development of the platform is described.

Finally, Section 5 presents the conclusions of this report.

Table of change history

Date	Version	Comments
31 December 2007	1.0	First version sent to the EC for review
16 September 2008	1.1	Updated version

2 Harvested materials

As mentioned in the Introduction, the first few materials ported to the SELF platform have been chosen from the list of selected materials provided in the Deliverable Report D1 [1] of this project. From the list provided in that document, a first selection has been made by the different members of the SELF Consortium so as to atomise those materials and migrate them to SCORM using the ATutor system. The list of those materials is given in Section 2.1. Section 2.2 summarises the migration process applied to convert the harvested materials to SCORM and, finally, Section 2.3 deals with the “reference materials” which can not be ported to SELF due to licensing restrictions, but which are considered interesting enough so as to keep them in a separate repository as relevant works to be referred to.

2.1 List of harvested materials

Below you can find the materials that have already been transferred to the ATutor site (see Section 2.2) and will be migrated to the SELF platform shortly. Obviously, where the license holder is unknown, or in the case of a specific license, an authorisation will have to be granted before these materials can be ported to the platform.

The following materials have been ported to ATutor by ISOC.NL:

- Free As In Freedom – Richard Stallman's Crusade For Free Software [M1] (GFDL)
- OpenOffice.org2.x Getting Started Guide [M2] (GFDL)
- OpenOffice.org2.x User Guide [M3] (GFDL)
- GNOME 2.14 Desktop System Administration Guide [M4] (GFDL)
- An Introduction to KDE [M5] (GFDL)
- FLOSS Concept Booklet [M6] (GFDL)

The following materials have been transferred to ATutor by GU:

- OpenOffice.org2.x Write Guide [M7] (GFDL)
- The Gnumeric Manual [M8] (GFDL)
- Gnumeric functions [M9] (GFDL)
- The KSpread Handbook [M10] (GFDL)
- Quickstart Guide for Impress [M11] (GFDL)
- The Not So Short Introduction To LaTeX2e [M12] (GPL)
- Introduction to Mozilla Thunderbird [M13]

Note: the license of this material is not known. It must be confirmed whether it can be included in the SELF platform or not.

- Bash Guide for Beginners [M14] (GFDL)
- Bourne Shell Scripting [M15] (GFDL)
- Grokking the GIMP [M16] (OPL)
- Inkscape basic tutorial [M17] (GPL doc. Software)
- Inkscape advanced tutorial [M18] (GPL doc. Software)
- Inkscape shapes tutorial [M19] (OPL)
- Inkscape calligraphy tutorial [M20] (OPL)
- QCad User Reference Manual [M21] (GFDL)
- QCad FAQ [M22]

Note: the license of this material is not known. It must be confirmed whether it can be included in the SELF platform or not.

- Audacity Reference [M23] (GFDL)
- AGNULA tutorials [M24] (Unknown)

Note: the license of this material is not known. It must be confirmed whether it can be included in the SELF platform or not.

- Inkscape tips and tricks tutorial [\[M25\]](#) (OPL)

The following materials have been transferred to ATutor by UOC:

- Desktop User Guide [\[M26\]](#) (GFDL)
- The KDE User Guide [\[M27\]](#) (GFDL)
- KDE Frequently Asked Questions [\[M28\]](#) (GFDL)
- KDE for System Administrators [\[M29\]](#) (GFDL)
- Blender 3D: Noob to Pro [\[M30\]](#) (GFDL)
- Blender User's Manual [\[M31\]](#) (Open Content License)

Note: the Open Content License is not considered free by the Legal Expert Group (LEG). It is also excluded from the list of licenses accepted for reference materials. This material will be moved to the SELF repository only if the authors accept re-licensing it.

The following materials have been Transferred to ATutor by ISOC.BG:

- Inkscape elements of design tutorial [\[M32\]](#) (OPL)
- A Guide to Mozilla 1.0 [\[M33\]](#) (Mozilla Public License)

Note: this license must be examined by the Legal Expert Group (LEG). It must be determined whether this material can be included as part of the SELF repository, the reference repository or neither of them.

- Introduction to Gaim [\[M34\]](#)

Note: the license of this material is not known. It must be confirmed whether it can be included in the SELF platform or not.

- GNU/Linux Command-Line Tools Summary [\[M35\]](#) (GFDL)

Below, a list materials which are pending their migration to the SELF platform is provided. As above, in cases of unknown licenses, Open Content License, Mozilla Public License, the Legal Expert Group must determine how to deal with these materials:

- The Gimp Documentation [\[M36\]](#) (GFDL)
- Open Sources: Voices from the Open Source Revolution [\[M37\]](#) (GFDL and others)
- Open Source & Free Software Licensing [\[M38\]](#) (CC by nd)
- OpenOffice.org2.x Migration Guide [\[M39\]](#) (GFDL)
- The KWord Handbook [\[M40\]](#) (GFDL)
- OpenOffice.org2.x Draw Guide [\[M41\]](#) (GFDL)
- Mozilla 1.0 Frequently Asked Questions [\[M42\]](#) (Mozilla Public License)
- An introduction to Mozilla Firefox [\[M43\]](#) (Unknown/Web)
- <http://docs.kde.org/development/en/kdepim/kmail/> [\[M44\]](#) (GFDL)
- Introduction to Linux A Hands on Guide [\[M45\]](#) (GFDL)
- Advanced Bash-Scripting Guide [\[M46\]](#) (GFDL)
- Network Administration [\[M47\]](#) (CC by sa)
- CUPS documentation centre [\[M48\]](#) (GPL doc. Software)
- GNU Emacs Manual [\[M49\]](#) (GFDL)
- GNU Emacs FAQ [\[M50\]](#) (GFDL)
- LDAP operations HOWTO [\[M51\]](#) (GFDL)

And, finally, here are the materials which were originally considered for migration to the SELF platform, but whose copyright licenses will not permit them to be used:

- FreeBSD Handbook [M52] Copyright
- Securing and Optimizing Linux [M53] Copyright
- GNU Octave Manual [M54] Copyright © 1996, 1997 John W. Eaton. Permission is granted to make and distribute verbatim copies.
- Blender y Yafray. Diseño Gráfico 3D con Software Libre [M55] CC by nd nc

2.2 Migration of content to ATutor

Since the SELF platform was not ready at the time when the first few harvested materials were ready for migration (and new materials ready to be created), the free software platform ATutor [2] was used to conform the contents to e-learning standards and to generate a SCORM version of them. This SCORM version can be ported to SELF via the appropriate import feature of the platform. To facilitate this task, the platform ATutor has been installed to be used by the community of SELF authors and collaborators and is available at the following site: <http://atutor.selfproject.eu/>.

After registering at this installation of ATutor, it is possible to enter content and browse the existing courses. The process of migrating a course to ATutor consists of two main steps:

1. Atomise the content. The selected course must be divided into pieces (atoms or basic Learning Objects) of a reduced length (for example the last level of sub...subsections) and each of these pieces is represented as a different object.
2. The atoms are combined in a hierarchy to build up the original course.

There are several properties/features which can be filled in the ATutor platform related to the courses. Some course properties include:

- **Description**

A meaningful but brief paragraph describing the course, to be displayed under the course name in *Browse Courses*.

- **Export Content**

Makes it possible to export an object or the whole course (in SCORM format).

- **Syndicate Announcements**

Allows to make an RSS feed of the course announcements available for display on another website.

- **Access**

Determines who can have access to the course content – any user, only logged in users, or logged in and enrolled users.

- **Release Date**

The date when the course can be accessed by readers. Or, available immediately.

- **Banner**

HTML that forms a custom banner or splash screen for the course home page. Appears above the course announcements, if there are any.

- **Initial Content**

Allows initialisation of the course content to be either empty, basic place-holder content, or a restored backup from other courses .

Content in ATutor can be managed in many ways and can be imported and created from many different sources. Content can be entered manually, created from HTML files, standards compliant content packages, or from a learning objects content repository. Content that already exists in ATutor can also be exported into different formats, such as the SCORM standard. Only instructors, and assistants who are given content privileges, can manage course content.

Using the Tabs in the Content Manager, content can be created, its location, keywords, and date properties set, and glossary terms defined. It can also be previewed and have its accessibility checked. While creating content, it is advisable to save information often. Unsaved information is indicated by a red bullet in the corresponding Content Manager tab.

Content can be created in either “plain text” or “HTML” mode. Plain text mode is useful for quickly writing up text content. HTML mode allows for extra features like text formatting and layout, but is a little more complex to use. If using plain text mode, the content is just typed in the Body window. In HTML mode, you can type HTML tags in the Body window along with text.

Other useful author features included in ATutor are the following:

- **File Manager**

The File Manager is a tool that allows the author to upload files from a local system to be used in a course.

- **Terms**

In either plain text or HTML formatting mode, you can insert *terms* to tell the ATutor system which words you wish to mark as glossary terms. Once you have specified the terms you would like to define, you can go to the *Glossary Terms* tab to write the definitions. Once this is done, the terms and their definitions will appear in the glossary and in the content.

- **Code**

In either plain text or HTML formatting mode, you can insert *code* which is useful for differentiating blocks of text (like math equations, program code, or quotations) from the rest of the text content.

- **Previous/Next**

Links can be generated by inserting the appropriate codes in ATutor content. When the page is displayed these codes get converted to the URL/Link for the previous or next pages in the sequence of content pages.

- **Colours**

Like *code* and *terms*, colour may be added to text content.

- **Upload from File**

Rather than typing out content, it can be uploaded from a text or HTML file on your local file system. Once uploaded, the content of that file will be displayed in the *Body* window.

- **Save and Close**

While editing or creating content, content can be saved to avoid content losses . When an object is finished, the *close* function can be used to close the content editor.

2.3 Reference materials

As already reported, some of the materials chosen during the development of Workpackage 2 [1] are published under a license which is not included in the list of acceptable licenses approved by the Legal Expert Group (LEG) [3]. The authors of these materials will be contacted by the LEG so as to re-license them, since they are considered to be valuable high quality educational materials.

If the materials are not eligible to become part of the SELF repository due to licensing issues, and the authors do not agree to re-license them, they may still be ported to a separate **reference repository** in the platform. According to the definition of Educational Materials provided by the LEG [4], the materials in this reference repository must be published under a license allowing the documentation to be redistributed at no cost and studied, but which does not allow modification. Such materials cannot be included in the SELF materials themselves, but can be used as Historic Reference by other SELF materials and shipped alongside them. The list of licenses acceptable for materials to become part of the reference repository is also given in [3].

Among the materials which will be included in the reference repository if their authors do not agree to re-license them we can mention the following:

- Open Source & Free Software Licensing [M38] (CC by nd)
- GNU Octave Manual [M54] Copyright © 1996, 1997 John W. Eaton. Permission is granted to make and distribute verbatim copies.

2.4 URLs of the harvested and reference materials

- [M1] <http://www.oreilly.com/openbook/freedom/>
- [M2] <http://documentation.openoffice.org/manuals/oooauthors2/0100GS-GettingStarted.pdf>
- [M3] http://documentation.openoffice.org/manuals/OOo2.x/user_guide2_draft.pdf
- [M4] <http://www.gnome.org/learn/admin-guide/latest/>
- [M5] <http://docs.kde.org/development/en/kdebase/quickstart/index.html>
- [M6] http://en.wikibooks.org/wiki/FLOSS_Concept_Booklet
- [M7] <http://documentation.openoffice.org/manuals/oooauthors2/0200WG-WriterGuide.pdf>
- [M8] <http://www.gnome.org/projects/gnumeric/doc/gnumeric.shtml>
- [M9] <http://www.gnome.org/projects/gnumeric/functions.shtml>
- [M10] <http://docs.kde.org/stable/en/koffice/kspread/kspread.pdf>
- [M11] <http://documentation.openoffice.org/manuals/oooauthors2/0501IG-QuickstartGuideForImpress.pdf>
- [M12] <http://www.ctan.org/tex-archive/info/lshort/english/lshort.pdf>
- [M13] http://opensourcearticles.com/articles/introduction_to_thunderbird
- [M14] <http://tille.xalasys.com/training/bash/>
- [M15] http://en.wikibooks.org/wiki/Bourne_Shell_Scripting
- [M16] <http://gimp-savvy.com/BOOK/>
- [M17] <http://www.inkscape.org/doc/basic/tutorial-basic.html>
- [M18] <http://www.inkscape.org/doc/advanced/tutorial-advanced.html>
- [M19] <http://www.inkscape.org/doc/shapes/tutorial-shapes.html>
- [M20] <http://www.inkscape.org/doc/calligraphy/tutorial-calligraphy.html>
- [M21] http://www.ribbonsoft.com/qcad/manual_reference/
- [M22] http://www.ribbonsoft.com/qcad_doc_faq.html
- [M23] <http://audacity.sourceforge.net/manual-1.2>
- [M24] http://www.agnula.org/documentation/dp_tutorials
- [M25] <http://www.inkscape.org/doc/tips/tutorial-tips.html>
- [M26] <http://www.gnome.org/learn/users-guide/latest/>
- [M27] <http://docs.kde.org/development/en/kdebase/userguide/index.html>
- [M28] <http://docs.kde.org/development/en/kdebase/faq/index.html>
- [M29] <http://www.kde.org/areas/sysadmin/>
- [M30] http://en.wikibooks.org/wiki/Blender_3D:_Noob_to_Pro
- [M31] <http://mediawiki.blender.org/index.php/Manual>
- [M32] <http://www.inkscape.org/doc/elements/tutorial-elements.html>
- [M33] <http://www.mozilla.org/start/1.0/guide/>
- [M34] http://opensourcearticles.com/articles/introduction_to_gaim
- [M35] <http://www.tldp.org/LDP/GNU-Linux-Tools-Summary/html/index.html>
- [M36] <http://docs.gimp.org/download.html>
- [M37] <http://www.oreilly.com/catalog/opensources/book/toc.html>
- [M38] <http://www.oreilly.com/catalog/osfreesoft/book/>
- [M39] <http://documentation.openoffice.org/manuals/oooauthors2/0600MG-MigrationGuide.pdf>

- [M40] <http://docs.kde.org/stable/en/koffice/kword/index.html>
- [M41] <http://documentation.openoffice.org/manuals/oooauthors2/0400DG-DrawGuide.pdf>
- [M42] <http://www.mozilla.org/start/1.0/faq/index.html>
- [M43] http://opensourcearticles.com/introduction_to_firefox
- [M44] <http://docs.kde.org/development/en/kdepim/kmail/>
- [M45] <http://tille.xalaysys.com/training/tldp/>
- [M46] <http://tldp.org/LDP/abs/html/>
- [M47] <http://learnlinux.tsf.org.za/courses/build/net-admin/index.html>
- [M48] <http://www.cups.org/documentation.php>
- [M49] <http://www.gnu.org/software/emacs/manual/emacs.html>
- [M50] <http://www.gnu.org/software/emacs/emacs.html#HelpFAQ>
- [M51] <http://tille.garrels.be/training/ldap>
- [M52] http://www.freebsd.org/doc/en_US.ISO8859-1/books/handbook/
- [M53] <http://www.andamooka.org/index.pl?section=secopt>
- [M54] <http://www.gnu.org/software/octave/doc/interpreter/>
- [M55] <http://mtraker.gmbros.net/archivos/24hBlenderYafray.pdf>

3 New materials

As mentioned in the Introduction, the first few materials ported to the SELF platform were chosen from the list of selected materials provided in the Deliverable Report D1 of this project. Apart from these harvested materials, during the development of the SELF project, some materials have been created to contribute to some of the gaps detected in the report D1 [1].

3.1 Materials created to fill in the detected gaps

Some new materials have been created by the UOC group to contribute to the fields of basics of **Free Software and Open Standards advocacy** (reported as a gap in Section 4.1.2 of the Deliverable Report D1 [1]) and **office tools** and the **specific application** OpenOffice.org Base (detected as a gap in Section 4.2.4 of the Deliverable Report D1 [1]). The rest of the new materials created by the UOC group contribute to the gap **Resources structured as learning materials** (reported as a gap in Section 4.1.1 of the Deliverable Report D1 [1]).

The new materials added by the UOC group are the following:

Title	Introduction to Free Software Original title: <i>Introducció al software lliure</i> (in Spanish)
Authors	Jesús M. González-Barahona, Joaquín Seoane Pascual and Gregorio Robles
Collection	Introduction to Free Software and Open Standards / Basic concepts and philosophy – History of Free Software and Open Standards
Covered gap	Free Software and Open Standards advocacy
Publication date	October 2007 in ATutor and ported already to the SELF platform (in Catalan, Spanish and English). A printed version in Catalan and Spanish was published in February 2008.
License	GFDL
Language(s)	Catalan, Spanish and English.
Format	SCORM version generated by ATutor and ported to SELF.
URL	http://beta.selfproject.eu
SELF (and ATutor) course titles	<i>Introducció al software lliure</i> (Spanish) <i>Introducció al programari lliure</i> (Catalan) Introduction to Free Software (Spanish)

Title	Basic GNU/Linux Operating System Original title: <i>Sistema operativo GNU/Linux básico</i> (in Spanish)
Authors	Francesc Aulí Llinàs, Roger Baig Viñas, Sofia Bellés and
Collection	Operating Systems / GNU/Linux
Covered gap	Resources structured as learning materials
Publication date	October 2007 in ATutor and already ported to the SELF platform (in Catalan, Spanish and English). A printed version in Catalan and Spanish was published in February 2008.
License	GFDL
Language(s)	Catalan, Spanish and English.
Format	SCORM version generated by ATutor and ported to SELF
URL	http://atutor.selfproject.eu
ATutor and SELF course titles	<i>Sistema operativo GNU/Linux básico</i> (Spanish) <i>Sistema operatiu GNU/Linux bàsic</i> (Catalan) Basic GNU/Linux Operating System (English)

Title	Advanced Administration of GNU/Linux Original title: <i>Administración avanzada de GNU/Linux</i> (in Spanish)
Authors	Josep Jorba Esteve and Remo Suppi Boldrito
Collection	Operating Systems / GNU/Linux
Covered gap	Resources structured as learning materials
Publication date	October 2007 in Atutor and already ported to SELF. A printed version was published in September 2007.
License	GFDL
Language(s)	Catalan, Spanish and English.
Format	SCORM version generated by ATutor and ported to SELF.
URL	http://atutor.selfproject.eu
SELF (and ATutor) course titles	<i>Administración avanzada de GNU/Linux</i> (Spanish) <i>Administració avançada del GNU/Linux</i> (Catalan) Advanced Administration of GNU/Linux (English)

Title	Free Software Utilities and Tools Original title: <i>Utilidades y herramientas de software libre</i> (in Spanish)
Authors	Jesús Corrius Llavina
Collection	Office tools and Communication tools
Covered gap	Specific application (OpenOffice.org Base)
Publication date	October 2007 in ATutor and already ported to SELF. A printed version was published in September 2007.
License	GFDL
Language(s)	Currently published in Spanish and Catalan.
Format	SCORM version generated by ATutor and ported to SELF.
URL	http://atutor.selfproject.eu
SELF (and ATutor) course titles	<i>Utilidades y herramientas</i> (Spanish) <i>Programari lliure: utilitats i eines</i> (Catalan)

All these documents are high-quality materials and are already available. They will be labelled as **showcase materials** so that they can be considered as a good example of the educational materials in the SELF repository.

In fact, the materials “Introduction to Free Software” have been already edited in the form of a book (in English) to illustrate the possibilities of the SELF platform. This book is available both in hard copy and in digital version. The authorship of these materials have been financed by the UOC, but the translation into English has been partly financed with the EC funds whereas the rest has been covered with the UOC's own funds. This book provides an introduction to the world of Free Software, covering its main concepts, some of the most successful free software programmes, the specifics of their development and the legal basis that free software licenses provide for the protection of users' freedoms. It also contains a large directory of glossary, bibliography and links to help the reader explore deeper into this field. In the UOC's Master Programme on Free Software, this course material is used as starting point, replacing older editions of similar contents. While this book provides an excellent introduction to Free Software, it is also an illustrative example of how the SELF Platform can be used to produce new materials.

See for more information: http://selfproject.eu/en/Coursebook_Intro_Free_Software

3.2 Materials about SELF

The SELF Project itself needs to be the topic of a collection of high quality educational materials. The SELF Platform, as specified in the platform definition described in the Deliverable Report D5 [5], needs good documentation for users and authors, and the technology behind it must be documented both for systems administrators and developers. Also, good train-the-trainer materials will help us achieve the network effect that can make the SELF community grow.

With these aims and target groups in line, a set of materials is being developed. The work is temporarily being conducted internally within the Learning Materials Group (LMG), but as soon as the platform provides the basic functionality their development will be moved to it so that everyone can join. At the time of writing, we are working on the following materials about SELF.

3.2.1 SELF Users Guide

The SELF Users Guide aims to be the main resource both for new authors and for those already familiar with the platform who are looking for help or support. The document is structured in two main parts, a general introduction to the authorship of structured learning materials followed by a practical guide on the features of the SELF Platform.

Any person who is active in any educational area can produce or contribute to a learning material in SELF. However, many of the authors reading the guide will have no previous experience in creating learning materials, at least not for use in an LMS. A basic introduction to the authorship of educational materials will be helpful for novice authors.

The SELF Platform will make the authoring and collaborating experience as easy as possible, but basic understanding of the structure and characteristics of Learning Objects will help authors better plan and structure their content.

In the second part of the guide, the main features of the SELF Platform are described step by step as seen by a new user. This section can also be used separately as a “Getting Started with SELF” guide, showing the advantages of modularity of content. After that introduction, each of the features and views of the platform are described in detail, using practical examples for the most common tasks. Since the platform itself is a work in progress and new features will be added often in the coming months, the Users Guide will in turn be expanded and updated when new features are included.

3.2.2 SELF Platform Installation Guide

Many organisations and individuals have expressed their interest in the SELF Platform. Some of these parties are interested in contributing their existing materials or in using SELF as their authorship tool for new materials. Others want to integrate the technology behind SELF to their own products, or to use it internally in their organisations. In any case, they all want to test the platform, give feedback and even collaborate in the development. All these contributions are very valuable, and must be encouraged and facilitated. A main requirement in that sense is having good documentation for systems administrators and developers who want to install their own instance of the SELF Platform. The SELF Platform Installation Guide covers this need.

The Installation Guide is aimed at technical readers, and thus it is not excessively didactic. Also, despite the platform being platform-independent, the Guide concentrates on the installation of the SELF software on a free operating system such as GNU/Linux or FreeBSD. The first version of this material focuses on Debian GNU/Linux, since that is the platform where SELF is actually developed and hosted. Additional versions of system-specific sections will be added as the testing community grows.

The SELF Platform Installation Guide has three main parts, namely, *Previous requirements*, *Installation of the platform* and *Configuration of the platform*. In the first version of the Guide, the requirements for the installation consist of a list of software that is required to be able to install the platform. This part will be developed further into a more detailed guide to the installation and configuration of the base system upon which SELF will run.

The second part details the installation of the SELF Platform on top of the base system step by step. This section is still platform-dependent, since many of the required actions are system-specific. As in the first part, the Learning Materials Group focus on the installation of SELF in free operating

systems starting with Debian GNU/Linux. Expanding these parts to other platforms will hopefully be a task shared within the community.

The third part of the Installation Guide covers the configuration of the platform in order to adapt it to specific needs. The Learning Materials Group concentrates on describing the process followed in the SELF servers to set up a working instance of the platform as used in the SELF Project. Other parties will be encouraged to contribute their experiences on different uses of the technology behind the SELF Platform.

An early version of this guide can be referred to at the beta site of the SELF platform [\[6\]](#).

3.2.3 Training materials on SELF

One of the main goals of all the groups in SELF is spreading knowledge about the project and the platform in order to attract individual authors as well as institutions, making the community grow and strengthening the project. In order to achieve this goal, and besides the usual communication channels and the specific tasks of each group, members of the SELF Consortium are very active in a wide spectrum of public forums, ranging from local to international events, both in person and on-line. These activities include meetings, workshops, hands-on sessions, speeches and talks, and are addressed to different targets and audiences.

The Learning Materials Group is fully aware of the importance of this aspect of the project, and is committed to developing and improving a set of materials to be used by any person who wants to spread the word about SELF. This set will be built using, as a starting point, the materials that are already being developed for all these activities: talks, speeches, presentations, notes, outlines and workshop scripts, mainly created by members of the Consortium. Many of these materials have already been circulated internally, adapted and reused, but up until now they have not been easily accessible to others.

We aim to build a network of SELF trainers and arm them with sets of train-the-trainer materials. With the help of these high quality materials, they will be able to build local SELF users groups and spread the word about the platform and the opportunities it can offer to different target groups.

3.3 Other materials under development

The Learning Materials Group is already developing topic-specific materials that are considered to be top-priority because of a general lack of learning materials in these areas. Here we present the materials on which work has already started.

3.3.1 Free Software applications overview

An increasing number of people are curious about Free Software and Open Standards, and hopefully SELF can play a role in helping these users get started. A resource which is frequently requested is a general overview of the main free software applications which a desktop user can find useful for domestic and office work. Many introductory materials have been written on specific applications or areas such as office tools or communication tools. With this overview we want to cover all these areas –reusing existing good quality materials where licenses allow it– and others which are not usually mentioned.

When facing this kind of project, the usual approach is to cover only the most widespread application for each task. This can have its advantages, as it is simpler for the reader and reduces the

amount of research to be conducted by the authors. On the other hand, it limits the freedom of choice of the reader and gives him or her a distorted view of the free software world, where there are always choices and options, and many applications compete for the niche of users seeking to accomplish a given task.

In this material, while trying not to overwhelm the reader with huge lists of applications for every single task, we try to cover all relevant applications and provide the readers with enough information to make their own choices. Where possible, at least two alternative options are given for each task, summarising their main features, similarities and differences.

At the time of writing this report, this material is under construction, and the SELF community can contribute to it.

3.3.2 VoIP

Voice over IP has been a hot topic in the IT industry for years, but until lately its influence in the end user and domestic market was limited. The success of VoIP services like *Skype*, which do not comply with VoIP transport standards, threatens to either fragment the market in several incompatible segments, or result in a single closed-source provider monopoly. The alternative scenario that the SELF Project wants to promote is an open market of VoIP services where individual users, SMEs and international corporations provide services using any or all of the various open standards that already exist.

Free software is also very relevant in this sector. Asterisk [\[7\]](#) is a complete PBX over IP solution, released under the GPL license. Its flexibility allows it to cover a wide range of needs, from a small office up to a huge datacenter. On the client side, many free software applications can be used as SIP clients to talk with others using a computer, without the need of specific hardware.

The topic is aiming at a reader that needs to know more than the average user: an IT manager studying different options for her enterprise, or a power user who wants to know more about what is going on on the other side of the VoIP line would be targets for this material. However, the client side part can be used as a standalone material for end users, and eventually the server side part can be extended to a guide to VoIP for systems administrators.

Just like the overview of Free Software applications, this material is under construction and the SELF community is welcome to contribute to it.

4 Learning Materials Group (LMG): the “wiki approach”

The Learning Materials Group (LMG) of the SELF project is formed by all the **authors** and **contributors** who collaborate in the creation, updating, correction and translation of the body of materials which make up the SELF repository. The LMG members are divided into two different groups:

1. **Authors.** They create new content from scratch or by joining different pieces of content and complementing them with value-added contributions with a significant addition (at least 10% of the size of the largest contribution) of new material.
2. **Contributors.** They correct (e.g. by fixing misspellings, typos or small errors), update or translate existing materials, but do not create new materials from scratch. They can also add their own content to an existing Learning Object, or build up a new Learning Object from existing pieces, but their contribution is less than a given percentage of the overall project (less than 10% of the size of the largest contribution).

Obviously, the boundary between both types of members of the LMG is not clear-cut. Some *authors* of a given material can be *contributors* to a different one, a *contributor* may easily become an *author* if s/he adds up to a given percentage of new content and conversely, an *author* may revert to *contributor* if s/he no longer creates new content but just provides fixes for existing materials. The purpose of these two types of LMG members is to establish a difference between those members who really **create** materials and those who just make corrections and/or translations. This distinction will be useful to keep track of the authors, which is a relevant requirement of the Quality Assessment process [8].

The way these members of the LMG cooperate to develop, amend or translate the SELF materials is the so-called “wiki approach”. As defined in Wikipedia [9], *a wiki is a type of software that allows users to easily create, edit and link web pages*. Wikis are a powerful tool in creating collaborative websites and are becoming increasingly popular in community portals and also in corporations where the members of several teams cooperate to generate documentation. Wikis allow the collaborative writing of documents using a web browser and with a very simple markup language, which makes them extremely useful in this kind of task.

In addition, Wikipedia [9] defines two separate concepts, namely, the “wiki page” which is a single page in a wiki, and the “wiki” itself, which is the entire body of pages interconnected via hyperlinks. In this sense, the SELF project provides a full wiki where the authors can join existing projects of material creation or start new projects to cover their particular needs. This wiki will be formed by many wiki pages with different objectives (new materials, calls for contributions, discussion threads) as detailed below. It is worth pointing out that the SELF wiki is a temporary substitute for many of the author tools which will be provided by the upcoming releases of the SELF platform. The SELF wiki can be accessed through the following URL:

<http://wiki.selfproject.eu/index.php/LMWiki>

The main purpose of this wiki is to improve the communication process between the LMG teams and members and help us build a community around the creation and translation of the SELF materials. This wiki will eventually become unnecessary for the creation process when the SELF Platform provides all the necessary communication and authorship tools.

A defining characteristic of the wiki technology is the ease with which pages can be created and updated. This feature can be used by the LMG in different ways:

- **Material creation.** It can be used as a replacement for the SELF material authorship tools to develop new contents in HTML format. These contents can then be ported to other platforms (such as ATutor) to generate a structured version of them converted to the SCORM standard which is a valid input format for the SELF platform [10]. The SCORM version of the materials can then be imported by the SELF platform. Given the current functionality of the SELF platform, the creation of contents does not need any other supporting tool and it can be assumed entirely using SELF.
- **Discussion thread.** Another possibility is to use the wiki as a discussion forum to manage the cooperative work of a group of authors who develop the contents off-line using an external application (such as OpenOffice.org Writer). In that case, the wiki would be exploited to coordinate several authors, but the authorship would occur mostly off-line.
- **Call for contributions.** A third possibility is to start a new materials project and to publish an “advertisement” (*call for contributions*) in the wiki so as to form a particular team of authors or contributors around a given project. Once such a team is constituted, the authorship of new content may occur either on-line inside the SELF wiki or off-line using the appropriate application.

Notice that not all contents will be text-based (the SELF materials may also include images, audio, video and other types of content). That is one of the reasons why the wiki editor may not be appropriate for all needs. Even for formatted text, some authors may want to use advanced features usually provided by specific editors (such as OpenOffice.org Writer). Thus, the possibility of producing the materials off-line is a must due to the requirement of allowing multimedia content in the SELF materials.

In order to make it easier for the authors and contributors to find their field of expertise, the wiki is being structured in the different collections defined for the SELF materials [1]. The new members of the LMG will be able to find their particular area of interest just in a few clicks. Inside a given project, the LMG members will be able to edit it freely, add comments, make corrections, link to a new wiki page, and so on.

Notice that the wiki philosophy is very appropriate for the SELF objective of **low-effort contributions**. This objective means that very limited requirements must exist for registration, enabling new LMG members to register quickly and easily so that they can collaborate in the creation of new content. Generally, the wikis are open to the general public and their content can be changed without the need to register for a user account. This is **not** the case for the SELF wiki, since the tracking of authors is a specific requirement for the Quality Assessment (QA) of materials. In addition, some parts of the wiki will be specifically private (“closed”) for a team of LMG members who collaborate in the creation of a given material. Hence, log-in will be requested for automatically signing edits in the SELF wiki.

This wiki philosophy slightly differs from the initial proposal of creating a group of reputed experts: the Learning Materials **Expert** Group. The initial idea was to appoint a group of just a few **recognised international experts** in the different topics covered by the SELF repository (related to the SELF collections) in order to guarantee the quality of the published materials, following a submit/peer-review process similar to that of the publication of scientific works. This idea was closely related to the Quality **Assurance** philosophy which has been replaced by a Quality **Assessment** strategy in the SELF project. With this new Quality Assessment approach, all (good

and poor) materials will be published in the SELF repository, but they and their authors will be **implicitly rated** (evaluated) by the SELF users. This evaluation of materials and authors will allow the highly rated content to evolve and “survive” in the long run (like in a *natural selection* process), whereas the lowly rated materials will possibly be abandoned or rewritten by the SELF community and the LMG members. With this new approach, it would make little sense to appoint a group of recognised experts to filter out the materials which do not satisfy the minimum quality requirements of the SELF project, since all materials will be accepted in the repository and their success will depend only on how the community implicitly evaluates them and their authors. For this reason, no list of names of the LMG members is given in this document. Anyone can become a member of the LMG just by registering for a user account in the SELF wiki (as of now) or directly in the SELF platform.

It must be taken into account that the main aim of the SELF project is not to produce materials itself, but to facilitate a platform which makes the collaborative production of those materials much simpler and to build a community of interested experts around it who will contribute to the growth of the SELF repository. In this sense, it is of great relevance to incorporate all the wiki features outlined in this Section in the next releases of the SELF platform in order to leverage the creation of such a community. These platform requirements are already defined in the *Authoring Model* of the detailed specifications of the platform issued in the Deliverable Report D4 [\[11\]](#).

5 Conclusions

The SELF project aims to **develop a platform** for the sharing and collaborative creation of free educational materials with a focus on Free Software and Open Standards. Hence, the objective of the SELF project is **not** to develop materials, but to provide the means to facilitate the creation of these educational contents. However, in order to show the usefulness of the platform, different materials are being ported to the SELF repository.

The materials included in the SELF repository of the first few releases of the platform are either **harvested** or **new** (to fill in the detected gaps). As detailed in Section 2 of this report, a list of more than 50 harvested materials were migrated to the free software platform ATutor [2] in order to obtain a SCORM version of them which is compatible with the internal format of the SELF repository via an import filter. However, some of these materials do not comply with the licensing restrictions established by the Legal Expert Group in the Educational Materials Definition [4] of the SELF Legal Policy [12] and will not be ported to the SELF repository unless their authors agree to re-license them using any of the licenses accepted in the SELF Legal Policy. In case the authors do not agree to re-license their work, some materials may still be included in a separate **reference repository** formed by high quality materials which may be used as Historic Reference by other SELF materials and shipped alongside them. The licenses acceptable for the separate reference repository are also listed in [3].

Apart from this selection and migration of already available materials, the SELF Consortium also made an effort to create some materials to fill in the detected gaps identified in the Deliverable Report D1 [1] of this project. This creation task has been undertaken from the very beginning of the SELF project and the first few results of this process are summarised in Section 3 of this document. The materials already developed or under development are divided into three categories:

- High quality materials to be used for the students of the official Master Programme in Free Software of the UOC. **Four text books with more than 200 pages each** have been written and migrated to the SCORM standard using ATutor. These four authorships have been fully financed by the UOC's own funding, but the translation of three of these four materials into English is being covered mostly (but not exclusively) by the financing of the SELF project by the European Commission.
- Materials about the SELF platform itself are being created to show new authors how the collaborative creation process of the SELF materials works.
- Some other materials are under development to cover a couple of topics which are interesting for a wide range of potential readers.

Among the harvested and new materials which will be available in the upcoming releases of the SELF platform, some of them will be selected as **showcase materials** to illustrate the type of educational contents that can be created using the SELF authorship tools.

Finally, the SELF Consortium has agreed to apply the so-called wiki model to the Learning Materials Group (LMG) which will be formed by all the *authors* and *contributors* who wish to add content to the platform. As pointed out in Section 4, the wiki philosophy is very suitable for the SELF objective of low-effort contributions, since wikis have been conceived to facilitate the collaborative writing of documents using a web browser and with a very simple markup language, which makes them extremely useful in this kind of task. The objective of the SELF wiki is threefold. Firstly, it can be used for *material creation*, by exploiting the authorship tools available in

all wiki systems (although this is no longer required since the SELF platform provides the required functionality for authors). Secondly, the SELF wiki can host *discussion threads* where LMG members coordinate an authorship which occurs mostly off-line using other applications. Finally, it can be a place to publish *calls for contributions* related to a particular need for educational materials. In any case, all of these wiki functionalities will be covered by the SELF platform in the ongoing releases, thus, the SELF wiki is just a temporary replacement for it.

6 Bibliography and web links

- [1] SELF Deliverable Report D1. http://selfproject.eu/en/system/files/D1_WP2.pdf
- [2] ATutor Content Management System. <http://www.atutor.ca/>
- [3] SELF List of Approved Licenses. <http://selfproject.eu/Software-Licenses>
- [4] SELF Educational Materials Definition. <http://selfproject.eu/EMD>
- [5] SELF Deliverable Report D5. http://selfproject.eu/en/system/files/D5_SELF-Platform-v0.6.pdf
- [6] SELF Platform Installation Guide and How-to
http://beta.selfplatform.eu/selfbeta/Members/selfuser/course3/course_manage
- [7] Asterisk – The Open Source Telephony Platform. <http://www.asterisk.org/>
- [8] SELF Quality Assessment Guidelines. http://selfproject.eu/en/system/files/SELF_WP8-QA-ReviewMeeting.odp
- [9] Wiki in Wikipedia. <http://en.wikipedia.org/wiki/Wiki>
- [10] SELF Deliverable Report D2.
http://selfproject.eu/en/system/files/Enhanced+D2_WP3_new.pdf
- [11] SELF Deliverable Report D4.
http://selfproject.eu/en/system/files/SELF_Platform_Definition_20070213.odt
- [12] SELF Project Results. <http://selfproject.eu/en/project/results>