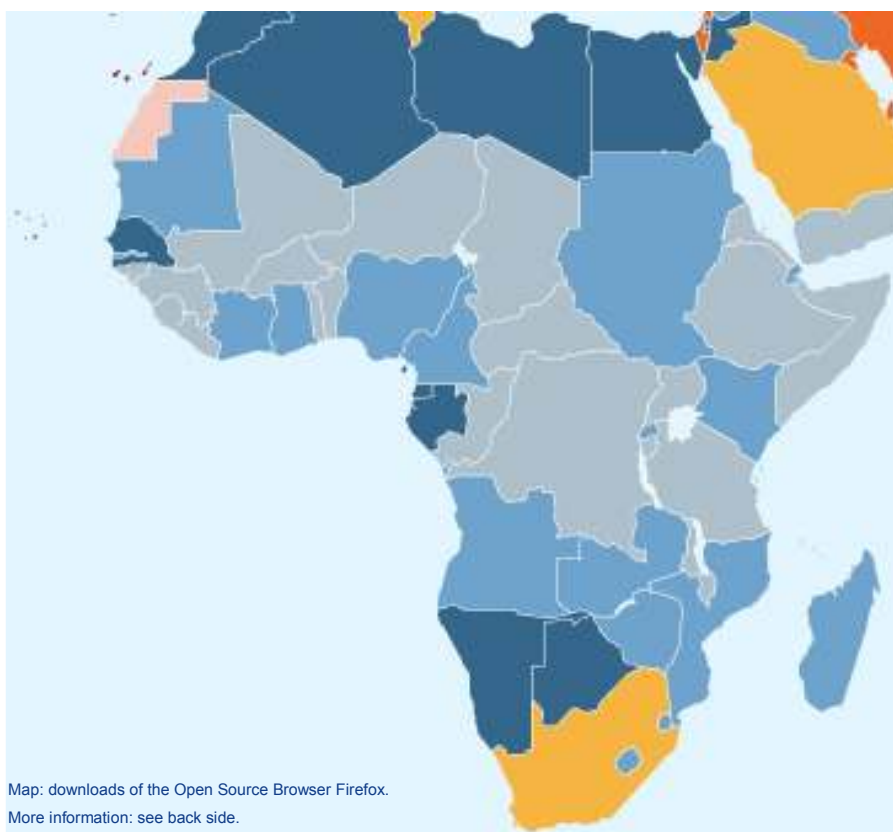# ict@innovation

Creating Business and Learning Opportunities in Africa with

Free and Open Source Software

- Are you interested in business opportunities arising from Free and Open Source Software (FOSS) in Africa?
- Are you part of an ICT training institution, university or regional or national ICT association in Southern or East Africa?
- Do you want to become a trainer for FOSS business models or FOSS certification?
- Are you interested in African innovations in FOSS?
- → Join ict@innovation – Promote FOSS for business and learning in Africa

Map: downloads of the Open Source Browser Firefox.
More information: see back side.

ict@innovation Info leaflet 2: Fostering FOSS Certification

On behalf of

Federal Ministry
for Economic Cooperation
and Development

FOSSFA
The Free Software and Open Source
Foundation for Africa

inWent
Capacity Building International
Germany

Introducing ict@innovation – Creating Business and Learning Opportunities with Free and Open Source Software

What is Free and Open Source Software?

Free and Open Source Software (FOSS) is software which can be freely used, modified and distributed. FOSS offers a number of different opportunities. Developers are able to customize, change or add to open source software and join in global open production processes. This can help stimulate local innovation and growth in the IT sector. With FOSS, small and medium-sized IT businesses can create locally adapted IT solutions, independent of foreign software vendors. FOSS allows local value chains to be tapped, instead of forcing customers to rely on foreign software vendors.

Free and Open Source Software technologies are used all over the world. FOSS is often the technology of choice to run servers, networks, or content management systems, but also operating systems such as Linux, or business and office applications such as OpenOffice. As FOSS is adaptable and does not entail license fees, it is particularly useful when applications need to be adapted to a specific context.

The use of FOSS is spreading – governments and businesses are increasingly employing FOSS. This means that the business market around FOSS solutions is growing. Local businesses, in particular IT-SME can benefit from FOSS as users, but more importantly they can generate business models around FOSS such as offering high-value IT services, software development, training and qualification.

Free and Open Source Software creates business opportunities!

FOSS technologies offer opportunities particularly for small and medium sized IT enterprises to provide IT services for local IT markets.

What do small and medium-sized enterprises (SME) in Southern and East Africa need to work with FOSS? Many IT-SME are not yet aware of how they can use FOSS in their business models – knowledge sharing and training is needed to qualify employees. In addition, trust in FOSS needs to be improved, for instance by spreading quality standards. ict@innovation addresses these topics by:

- Sharing knowledge on African Business Models and Skills in FOSS (Pillar A)
- Building trust and business through FOSS Certification (Pillar B - Focus of this information leaflet)
- Developing innovative local FOSS Applications (Pillar C).

ict@innovation is an international capacity building programme, implemented in partnership by **FOSSFA** - The Free Software and Open Source Foundation for Africa and **InWEnt** - Capacity Building International, Germany.

The **ict@innovation** programme offers **advanced training courses** for training institutions and trainers on:
- business models and business development for IT SME – how to integrate FOSS services in your training portfolio
- how to get certified in basic FOSS technical skills

Main objective of ict@innovation is to foster small and medium-sized enterprises (SME) in the field of Free and Open Source Software in Southern and East Africa. Through advanced training and networking in FOSS skills, the programme contributes to qualify African IT SME in providing localized and adapted FOSS applications and services to public administration and private sector.

The programme focuses on Free and Open Source Software (FOSS) as a key technology to drive innovation, add local value and create sustainable and affordable ICT-solutions.

Region of Implementation	2008-2012: Southern and East Africa, particularly Ethiopia, Kenya, Malawi, Mozambique, Namibia, Rwanda, South Africa, Tanzania, Uganda, and Zambia 2011-2012: West and Central Africa
Duration	2008 – 2012
Main Funding Partners	German Federal Ministry for Economic Cooperation and Development (BMZ) & the Open Society Initiative for Southern Africa (OSISA)

ict@innovation – Building trust and business through FOSS Certification

Pillar B – Fostering FOSS Certification

This pillar of the ict@innovation programme aims to help African SMEs involved in Open Source Solutions development, implementation and training to improve the quality of their services offered as well as the level of trust of customers through certification of their FOSS skills.

The project partners have appreciated the importance and urgency of increasing the number of certified Linux systems administrators on the African continent so as to have a bigger impact on the uptake of FOSS on the continent.

To achieve this, the program will implement the following interventions:

- Support the development of open content training material using the Linux Professional Institute Certification (LPI) - LPI is a distribution and vendor-neutral standard for evaluating the competency of Linux professionals
- Offer Training of Trainers to individuals in the participating countries, leading to the LPI exams for certification.
- Support the trainers to deliver Linux System Administration training and certification in their countries and institutions as a business model.

A major barrier against adoption and deployment of Free and Open Source Software (FOSS) in sub-Saharan Africa is the lack of human resources with FOSS skills demonstrated by recognized certificates. This programme aims to address the problem by qualifying trainers, so that these trainers in turn will be able to multiply their expertise for a self-sustaining development of FOSS human resources and requisite certification programmes.

The training of trainers is offered to individuals and institutions with a strong commitment to introduce the knowledge of Linux to others, their staff members and communities. This should be done by implementing trainings by the LPIC 1 certified representatives within three months after this programme. Monitoring and supervision will be provided by ict@innovation.

Are you working as a trainer, do you have a background in Linux system administration and are interested in promoting FOSS Certification?

Then participate in the ict@innovation regional training of trainer courses! You will be equipped to train others on Linux system administration based on the Linux Professional Institute Certification. (see next pages)

Are you a training institution or organisation working with or interested in promoting FOSS Certification in your country?

Become an outreach partner of ict@innovation: Send your trainers to the LPI Training of Trainers (LToT) courses and become part of the network of ict@innovation. Contact ict@innovation to find out how we can cooperate and support each other (see back page and www.ict-innovation.fossfa.net)!

Overview of ict@innovation LPIC-1 (Linux Professional Institute Certification Level 1)
Training of Trainers Course Contents

Who can participate?

We seek professionals and institutions, who have firm plans to make trainings on FOSS Certification a part of their regular business and/or teaching activities or upgrade existing certification efforts.

Successful applicants will convincingly demonstrate how they plan to carry out at least three trainings on the subject in their own country during 2011-12, and make LPI Certification training a permanent part of their business and/or teaching activities in the future.

More information on the FOSS Certification is online at:

http://www.ict-innovation.org/taxonomy/blog-category/foss-certification

The LPI Training of Trainers course is an advanced training program which prepares the participants for the Linux Professional Institute (LPI) Level 1 certification exam. Trainers and FOSS experts will be enabled to obtain certification in Linux systems administration and to develop, adjust and enhance material, that prepares others for LPI certification.

The Linux Professionals Institute (LPI) community certification program is a non-distribution specific program that certifies the competency level of Linux practitioners.
For this training, information about the LPIC-1 (101 and 102 exams (see topics below) is available at the LPI website: http://www.lpi.org

This advanced course not only prepares participants for the Linux Professional Institute (LPI) certification Level 1 but also prepares them to become Linux trainers in their own right.

Participants will receive intensive training on LPIC-1, and will also commit to book and sit the exams at the end of the training. They will also receive pedagogical training by imparting knowledge on how to be a FOSS trainer, FOSS Training as a Business, the organisation of trainings or communication skills and how to effectively train others in the subject, as well as training materials that will be developed under the project.

Examples of course modules and thematic elements of training programme

LPIC 1, Exam 101	• Topic 101: System Architecture • Topic 102: Linux Installation and Package Management • Topic 103: GNU and Unix Commands • Topic 104: Devices, Linux Filesystems, Filesystem Hierarchy Standard
LPIC 1, Exam 102	• Topic 105: Shells, Scripting and Data Management • Topic 106: User Interfaces and Desktops • Topic 107: Administrative Tasks • Topic 108: Essential System Services • Topic 109: Networking Fundamentals • Topic 110: Security
Pedagogical Training	• How to be a FOSS Trainer. • FOSS Training as a Business. • Organising Trainings. • Open Educational Resources and Open Content. • Communication Skills.

Joining the certification programme - When, Where, How?

Are you interested in becoming a trainer for LPI Certification?

Join the training programme, if you are:

- A trainer with an IT / business association or group
- A FOSS advocate with a FOSS association or group
- A specialist / trainer with an IT training institution (public or private)
- An IT & business lecturer at a higher education institution
- A Linux system administrator of an IT SME with outreach potential

Responsibilities

Participating institutions/participants are expected to:

- Organise at least three FOSS Certification trainings of their own in their country during 2011-12
- Integrate the LPIC course into their training portfolio or curriculum
- Assist in the localization and enhancement of training materials, by updating those materials and adapting them to specific local conditions and requirements

When? ict@innovation's regional training of trainers will commence in November 2010. Each regional training will take two weeks, requiring full time presence, preceded by a 3-4 weeks online preparation phase, with the LPIC-1 exams being held at the end of the 2-week training. The online courses will take place by distance learning and on a part-time basis.

Where? The regional trainings are scheduled to take place in the following countries:

- Kenya
- South Africa
- Tanzania
- Namibia

Who? If you would like to apply and participate in the regional training of trainers, you should

- Have a personal interest in the growth of FOSS
- Demonstrate how you will be able to pass on the knowledge gained in the trainings on a national level, either by being a staff member of a training institution, or working as a lead person in focus group activity or trainer with possibility to access training facilities (->Regular training track record)
- Be enterprising and have the ability to run a business / training courses
- Have at least two years of professional experience in Linux systems administration.
- Live in one of the countries listed on page 1

Female applicants are especially encouraged to apply and are given higher priority at the same level of qualification.

More information on eligibility criteria and application process is online, see www.ict-innovation.fossfa.net

How to apply?

a) Individuals: Write an application letter explaining why you would like to participate and become an LPI Trainer, and how you plan to act as a multiplier on a national level. Please include a description of present institutional affiliation and main activities as well as a supporting letter from your employer who supports you in attending this training of trainer course.

b) Institutions: contact ict@innovation to become an outreach partner, see p. 2.

Please provide:

- Profile of institution/company and CV of the participating personnel
- Short application letter (refer to criteria listed above). Please use the form online at: www.ict-innovation.fossfa.net
- Letter of recommendation from employer, association or contractor for similar engagements

Send the documents and application form to the **ict@innovation contact Africa,** Mr George G. Nyambuya (contact details see back page or website) and Mr Evans Ikua on ikua@fossfa.net

Free your IT-Business in Africa!

Information on the " Advanced Training Material on African FOSS Business Models for IT-SMEs" and other products of ict@innovation

Selected content of the Training course on FOSS business models:

1: Introduction to Emerging FOSS Business Models
2: African Business Models: Case Studies
3: Communicating FOSS
4: General Business Skills
5: FOSS Specific Business Knowledge and Skills
6: FOSS Training

In need of training of FOSS business models in Africa?

Contact the pool of more than 80 African ict@innovation expert trainers from 10 countries, who have been qualified in facilitating the course "ict@innovation: Free your IT-Business in Africa" at

Apart from fostering FOSS certification, ict@innovation is engaged in action on "Sharing knowledge on African Business Models and Skills in FOSS" and "Developing innovative local FOSS Applications" (see page one). Please check the website for further information and upcoming opportunities at: **http://www.ict-innovation.fossfa.net/**

Free your IT-Business in Africa! This advanced training course supports the building of knowledge and capacities in African small and medium ICT enterprises to make a business with Free and Open Source Software (FOSS). It aims to contribute to the growth of African ICT industries through spreading FOSS business models for enterprises in Africa. Eight in-depth case studies of African IT-businesses and organizations who successfully make a business around FOSS give concrete avenues for FOSS business models that work in Africa and are condensed in an African taxonomy of FOSS Business Models. The material has been collaboratively developed by FOSS experts from Africa and Europe for use as training material for experts and executive staff from IT businesses in Africa, ICT-associations, their member organisations, ICT-training institutions as well as universities and their trainers.
Download the course material here: http://www.ict-innovation.fossfa.net/node/4252

The ict@innovation Community Portal

http://www.ict-innovation.fossfa.net/

Site Features:

Profiles – Create your own profile, advertise your FOSS skills and share your interests in FOSS and the ict@innovation programme

Forums and Wiki – Read and contribute to discussions and work processes by engaging in online discussions in the forum and collaborative text editing using the wikis

Blogs – read and discuss about current news and developments on FOSS related topics and the ict@innovation programme in the blogs

Groups – Join in online organizational activities by engaging in topic specific groups

The web portal is designed to keep its members in touch with current developments of the ict@innovation programme and other FOSS projects in Africa. It is also designed to host a community of persons interested in or working in the area of FOSS in Africa.

Joining the ict@innovation Web Community

The Benefits: Why join? This website offers you the opportunity to get to know a range of persons working in related areas, as well as to advertise your skills and interests, to share and learn from other experts using the range of tools that enable active knowledge exchange for community members.

Staying Informed: Receive all blog posts and other website updates by email or RSS feed! In order for everyone to stay in touch with the programme and community activities, we offer an email-subscription and RSS feed service on all website services and news items (including blog posts, events, forum messages etc.).

Sign up on ict@innovation to join the community and stay updated:

http://www.ict-innovation.fossfa.net/

http://www.ict-innovation.fossfa.net

FOSSFA – The Free Software and Open Source Foundation for Africa

FOSSFA is the premier African FOSS organisation, and was founded under the auspices of the Bamako Bureau of the African Information Society Initiative within the mandate given by African Governments in 1995 to the United Nations Economic Commission for Africa (UNECA). The Vision of FOSSFA is to promote the use of FOSS and the FOSS model in African development, and the organization supports the integration of FOSS in national policies. FOSSFA also coordinates, promotes, and adds value to African FOSS initiatives, creativity, industry, expertise, efforts and activities at all levels. FOSSFA partners with development organizations who share these goals towards a participatory and gender-mainstreamed sustainable development and the attainment of the Millennium Development Goals in Africa. FOSSFA is governed by a Council elected during Idlelo, from which the Executive is chosen. FOSSFA members may be individuals, organizations, development agencies or government FOSS bureaus. The former South African Minister of Public Service and Administration, Ms Geraldine Fraser-Moleketi is a FOSSFA present Patron. http://fossfa.net/

InWEnt – Qualified to Shape the Future

InWEnt – Capacity Building International, Germany, is a non-profit organisation with worldwide operations dedicated to human resource development, advanced training, and dialogue.
Our capacity building programmes are directed at experts and executives from politics, administration, the business community, and civil society. We are commissioned by the German federal government to assist with the implementation of the Millennium Development Goals of the United Nations. In addition, we provide the German business sector with support for public private partnership projects. Through exchange programmes, InWEnt also offers young people from Germany the opportunity to gain professional experience abroad. http://www.inwent.org

Through its it@inwent programmes, InWEnt strengthens IT sectors in Africa and Asia, fosters key innovations in Information and Communication Technologies (ICTs) for economic development, and supports its partners to use ICTs as enabling tools for poverty reduction. http://www.it-inwent.org

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Cover page: Map of Africa with percent of population per country that downloaded the new version of the Open Source Browser Firefox in June 2008. Colours = downloads.
Source and credits: David Eaves, see http://eaves.ca/2008/06/22/the-firefox-download-map-remixed/

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