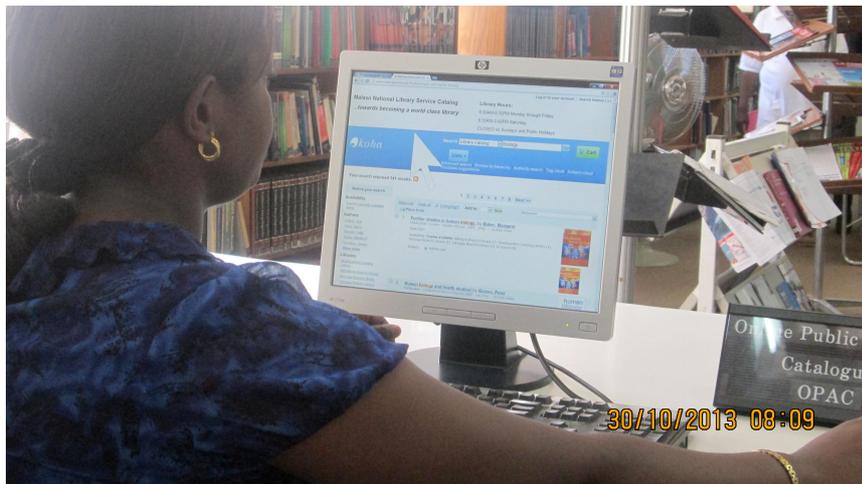




# EIFL-FOSS: Free and Open Source programme

Improving ICT infrastructure in libraries

## EIFL FOSS DISABILITY TOOLS CASE STUDY: MALAWI NATIONAL LIBRARY SERVICE



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### CASE STUDY

December 2013

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*This case study was case study provided by Chimwemwe Sumani and edited by EIFL-FOSS.*

## KEY ACHIEVEMENTS

- Three FOSS tools trialed and rolled out across all PCs on three sites.
- Positive responses from blind and vision impaired patrons, including stating that they will use the library more due to these tools.
- Plans to roll out more tools to support other disabled patrons.

## INTRODUCTION

Free and Open Source (FOSS) software can be readily used in many areas of computing, and particularly in libraries. FOSS tools exist for library automation, repositories and searching tasks, amongst many other areas. One area where there are many free and easy-to-use tools available is in providing an accessible service to physically or sensory impaired patrons.

A wide range of tools is available, ranging from on-screen magnifiers to support patrons with low vision in using electronic catalogues or the internet; tools to change the colour of the screen background or text, for those with colour blindness or vision impairments; tools that read aloud any selected text on the screen (known as text-to-speech) for those with low vision, low literacy, or who simply prefer to listen as they read; and even screen-readers, tools which enable computers to be operated by people who are blind. A step-by-step guide to some of the more common tools, including detailed instructions of how to install and use them, can be found on the EIFL FOSS web pages: <http://www.eifl.net/disability-tools-step-step-guide>

In 2011 The University of Zimbabwe Library conducted a pilot project, led by Sub-Librarian Yeukai Chimuka, to discover how the use of these tools could support physically and sensory impaired patrons. The full report from this project can be downloaded here: <http://www.eifl.net/system/files/201201/eifl-fossocasestudy2011disabilitytoolszimbabwe.doc>

## BACKGROUND

In November 2011, the EIFL FOSS programme (with support from UNESCO) held a Regional Training Seminar in Tanzania. Library Directors and IT/FOSS Librarians were invited from fourteen African countries to learn about the benefits and technical implementation of free and open source (FOSS) solutions for libraries. The overall objective was to equip participants with sound technical capacity and greater confidence to implement FOSS in their library settings, as well as providing the opportunity to discuss strategies for rolling out more FOSS deployments in more libraries.

Along the delegates at the Regional Training Seminar was Chimwemwe Sumani, an IT Specialist at the Malawi National Library Service. During the Training Seminar, Chimwemwe attended a workshop delivered by Yeukai Chimuka of the University of Zimbabwe Library about her pioneering work to support the physically and sensory impaired patrons of her library by using FOSS tools such as on-screen magnifiers, and text-to-speech software. Chimwemwe realised that this was an area where the Malawi National Library Service could benefit from the knowledge she had gained to support their own physically and sensory impaired patrons.

## PROJECT

### FIRST STEPS AND STRATEGIC SUPPORT

When Chimwemwe returned home she realised that she could undertake work in this area directly supported by the strategic plan of the Malawi National Library Service. The first pillar of their strategic plan focuses on services to users, and its first goal is “Improving Quality of Library and Information Services to All Categories of Users”. One of the core strategic objectives within this is “To improve services to physically impaired and disadvantaged users (e.g. visually impaired, prisoners, illiterate etc)”. This gave Chimwemwe all the strategic drivers she needed to be able to develop the library service in this area.

Her next move was to meet with the Readers Service Department. This unit of the library serves patrons seeking general information, recreation and support with literacy, so it made an obvious ally in the support of physically and sensory impaired library patrons (for practical purposes in a library, poor literacy can be supported in similar ways to some vision impairments).

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## NEEDS ASSESSMENT

Chimwemwe's partnership with the Readers Service Department quickly resulted in them conducting a Needs Assessment on vision impaired library patrons. Their findings were very clear – many patrons needed an on-screen magnification tool and assistance with locating the mouse cursor, and there was also a need for a text-to-speech facility. They decided to make available three software tools:

- Virtual Magnifying Glass – this software provides a panel (of editable shape and size) which can be moved around the screen using the mouse or arrow keys, and magnifies the screen content beneath it from 1.5x to 16x.
- Enormouse – this software replaces the standard mouse pointer with a large, coloured mouse pointer which is more easily visually identified.
- Balabolka – this tool will read aloud either text-based documents (e.g. Word or PDF documents) or text copied and pasted into its window (e.g. from websites or catalogues). It uses any synthetic voices loaded onto the machine, including those built into the operating system. These three tools were installed on all public access computers at the National Library Service main premises in Lilongwe, and also two other sites.

## RESPONSE

The response from vision-impaired patrons was instant and the impact upon their library experience was revolutionary. Now that this software is available, the vision-impaired patrons reported that they feel more inclined to use the library more often and to use more of its services,. Some direct quotes include:

- “At least now we are able to see [the screen]”
- “Is it possible that I should have the software on my personal computer as well?”
- “Wow! This is what we call as being user friendly”
- “Organisations should take a good example of National Library Service in accommodating people with disabilities”
- “How can I get these software?”

## LESSONS LEARNED

- The library now realises the value in conducting Needs Assessments of all of its physically and sensory impaired patrons and responding to their needs. Previously the only active strategy to support physically impaired patrons focussed on those with physical and mobility impairments rather than people with sensory impairments.
- Some library staff have also been making use of the tools and have remarked that they have made their job easier.
- The text-to-speech software needs to be supported by the provision of headphones to avoid disturbing other library users – however library-provided headphones quickly disappear, so notices asking patrons to bring their own have been put up.
- On a personal note, Chimwemwe has reflected that undertaking this project has helped her to develop productive relationships within the library, such as with the Readers Service Department.

## FUTURE DEVELOPMENTS

The library plans to carry out another Needs Assessment that will follow-up the vision-impaired patrons to fully assess the impact of implementing these tools, and also to identify other groups who might be supported by the use of free software.

The National Library Service also plans to evaluate three more tools for supporting physically impaired users:

- RapidSet, a tool to enable users to change the colour of text and background on websites and electronic documents;
- Dicom, a spelling aid (English) to aid patrons in correctly spelling their search terms; and
- The accessibility features available within the Windows operating system itself. The National Library Service is preparing a report to present to the MALICO library consortium so that other libraries in Malawi may replicate their work and make libraries across Malawi more accessible to physically and sensory impaired patrons.

## CONCLUSION

The Malawi National Library Service is committed to providing more accessible services through FOSS tools, which has brought many benefits and which they will continue to use in the future. Chimwemwe herself reflects that the project has increased the impression that the library works to consider and meet the needs of its users (and potential users). By leading by example, it is hoped that more libraries across Malawi, and by this case study more libraries across the world, will make increased use of free tools to support their physically and sensory impaired patrons.