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Submission to the Australian Federal Budget

To the Australian Federal Treasurer. Linux Australia welcomes the opportunity to make this submission for the Rudd Government's first Budget.

This submission focuses on the benefits that Free and Open Source Software (FOSS) can provide to the Australian community, to families, and to industry, and highlights ways in which the Federal Government can encourage local deployment and development of FOSS in order to strengthen the local ICT industry and cement Australia's reputation as The Clever Country.

What is Free Software and Open Source (FOSS)?

Many of the principles behind FOSS are derived from the axiom of standing on the shoulders of giants, most famously used by Isaac Newton, which has guided scientific and industrial development for hundreds of years.

Free and Open Source Software (FOSS) is based on [four freedoms](#): the freedom to use the software however you wish, the freedom to study how the program works and adapt it to your needs, the freedom to make and distribute copies of the software to whoever you wish, the freedom to improve the software and publish or sell your improvements^[0]. This is made possible by providing the source code to the software in open formats, under a copyright license that explicitly provides the freedom for the source code to be adapted, reused, and redistributed. The terms "Free Software" and "Open Source" arise from these mutually supporting approaches to FOSS, and are promoted by international groups such as the Free Software Foundation and the Open Source Initiative.

The Free and Open Source approach encourages collaborative software development in the best scientific and academic tradition, resulting in a healthy, competitive and innovative local software industry.

Transparency of the development process means that it can be participated in and audited at all levels. Software is just another form of information, and people have the right to have full control over that information. In the same way that you are free to share cooking recipes with your neighbour, you should also have the freedom to share and change software.

Education

Education is vital for the life of a nation and FOSS helps education. The Rudd Government's commitment to an education revolution can be fully realised and articulated through the use of FOSS at all levels, from Kindergarten through to University.

Open Source technologies provide a wealth of secure, feature rich, low-cost and customisable applications, numbering in the many thousands, including an enormous amount of applications directly applicable to education.

Many schools and universities already use Open Source throughout their organisations, however due the lack of policy and leadership from Government, only schools with specialists on hand have the incentive and ability to take advantage of Open Source to any useful degree. If the Rudd Government did a vendor neutral review of Open Source for education (there are already some great publications about this in Australia and from abroad that could be leveraged), and created some clear policies around the use of Open Source in education, this would greatly help schools to lower their ICT costs as well as deliver an improved and commercially relevant set of skills. For example:

- The use of open source products in the classroom allows students to take the software home, and to reuse it in the future for fun, retraining or commercially
- Open source in the classroom reduces licensing burden (costs, tracking, and anti-competitive burdens), and reduces hardware costs and requirements
- Education ICT Infrastructure can be cutting edge, secure, standards based, feature rich and consistent between schools.
- Inexpensive computers for students running Linux are widely available both new (Eee PC, gPC, etc) and second hand allowing good value out of proposed laptop-per-student subsidies
- The entire software stack is available for review and modification, providing a potentially superior educational outcome
- FOSS is based on both a strongly moral view of the rights of computer users, and is firmly based in international copyright law, providing a good opportunity for ethical and legal considerations to be included in the IT classroom
- FOSS encourages IT training based on skill set knowledge rather than product knowledge

Industry

Commitment to FOSS in Education is necessary to meet the current and rapidly growing demand in the Industry and Government sectors. In the case of too many commercial technologies, when students who have been trained in a particular technology reach the work force, that technology is superseded. FOSS technologies and their changes are available to the student as they grow and enter the work force keeping their skill set current an offering greater value to their employer. The level of FOSS education Australia is not meeting the demand and falls behind competitive nations in Asia and Europe. Locally, there is a rapidly growing industry around supporting and developing FOSS solutions yet both users and supporters of Open Source struggle to find skilled employees and call for the inclusion of some key FOSS components into formal education, especially High School and University.

When training aid is provided, it would assist the recipients better to train using FOSS technologies.

FOSS combines collaboration, competition and a level playing field simultaneously. For example, corporate giants IBM and HP work together on Linux technologies that significantly value add their hardware, which they bring to the market in an intensely competitive manner and sell for profit. Both companies sell more as they now have access to markets that were previously unavailable. This same FOSS technology is available to small business attempting to reduce costs and innovate while benefiting from the latest enterprise level software.

Government - Open Standards

Mature Open Source technologies are generally built on Open Standards, which means when used in various levels of Government will reduce double & triple handling costs of data and make Government documents that are intended for public use more accessible. Often commercial software has a designed limited lifespan, and the formats associated with obsolete software are

frequently unreadable by their modern replacements. This conflicts with public expectations of access to government records both through historical releases and freedom of information, as well as internal governmental access to historical data. This implies a significant and increasing hidden cost to the Government of access to data in proprietary formats.

Australia should follow the lead of other Governments such as [the Netherlands](#)^[1], Norway, Brazil, Japan, India, and Italy, all of which recommend or mandate the use of the ISO-ratified ODF document format standard.

Government - Procurement

With the intent to reduce spending, Government should evaluate what Open Source applications are appropriate for Government usage and produce a dynamic short list that would greatly assist agencies in evaluating appropriate and mature Open Source technologies when considering new ICT initiatives. For instance, with the release of Vista many Government agencies see little to no value in upgrading. The British Educational Communications and Technology Agency recommended [not upgrading existing ICT systems to Vista](#)^[2] which can introduce compatibility and performance concerns. Evaluation of platforms such as [Ubuntu](#)^[3] should be carried out as a long term desktop replacement for government use as it is more innovative, sustainable and standards based than Windows XP and will work at full speed on less expensive hardware than Vista requires. The [French Government has chosen to do this](#)^[4].

Over the past 6 years [AGIMO has done great work](#) creating policy and an understanding about Open Source^[5]. If they were given more resources then they could provide a focal point for Government agencies to gain relevant information, guidance and policy direction about appropriate use of FOSS for agencies. Open Source technologies create an opportunity to reduce Government spending and are the reliable and sustainable foundation upon which other technologies including commercial and proprietary can be built.

For the cost, sustainability, reliability and interoperability reasons Open Source technologies should be better enabled as an option to ICT decision makers when evaluating new ICT strategies within the Australian Federal Government. This could also include a review of the existing Government procurement practices to identify any practical roadblocks to evaluating or procuring Open Source on equal grounds with proprietary software. This has been identified as a problem issue by many individuals within Government.

Government - Defence

Clear policy and leadership about Open Source in the Defence force should be created. Already there is a lot of FOSS usage in the Australian Defence Forces, however again there is little specific policy or leadership about what is or isn't appropriate to use, which means it is mainly used where there are people who can identify appropriate Open Source software to use. At a high level, it is extremely important that when purchasing defence equipment and systems that the source code is made available to relevant defence entities for security, maintenance, adaptation and development. Open Source software assists greatly in ensuring our defence systems are under local control (access to the source code) and are not able to be caught out by common ICT procurement traps such as vendor lock-in. We can happily introduce you to many people within Defence working with Open Source technologies for reasons of national security.

Research and Development

Several innovation centres around Australia have been created to assist Businesses and Government. We call for the creation of an Open Source Innovation Centre which would serve Industry, Government and the community by providing ready access to clear information and resources on how to leverage Open Source technologies for effective productivity gains and local innovation. Open Source technologies provide Australian businesses with the opportunity to

leverage global technologies in new and unique ways to meet new market needs. The NZ Minister of ICT said it best in a [recent speech](#):

"I challenge both public and private sector organisations to look again at some of the home-grown open source offerings and ask: Where better to invest than in building our local IT industry and our capability to make the most of what open source has to offer?"^[6]

[Linux Australia](#) is the peak body representing Linux users and developers in Australia. We associate with other organisations related to free and open source software, such as OSIA, AUUG, SAGE-AU in order to promote common goals.

Linux Australia is grateful for the opportunity to provide this submission and we would be happy and willing to discuss these proposals further.

Kind regards,

Jonathan Oxer
President
Linux Australia Inc

Reference Links:

[0] Free Software Definition

<http://www.gnu.org/philosophy/free-sw.html>

[1] Netherlands supports open standards

<http://www.heise.de/english/newsticker/news/100520>

[2] British Educational Communications and Technology Agency

"Upgrading existing ICT systems to Microsoft Vista or Office 2007 is not recommended"

<http://www.informationweek.com/news/showArticle.jhtml?articleID=205602879>

[3] Ubuntu

<http://www.ubuntu.com/products/whatisubuntu>

[4] The French Parliament switches to Kubuntu

<http://fridge.ubuntu.com/node/814>

[5] AGIMO

<http://www.agimo.gov.au/infrastructure/oss>

[6] NZ Minister of ICT recent speech

<http://pipka.org/blog/2007/10/27/new-zealand-it-minister-gets-open-source/>

Open Source Industry Australia

<http://www.osia.net.au/>

Open Source Consortium

<http://www.opensourceconsortium.org/>

Australian Service for Knowledge of Open Source Software (ASK-OSS)

<http://ask-oss.mq.edu.au/>