Open Source, Open Standards and Re-Use: Government Action Plan

Foreword

Open Source has been one of the most significant cultural developments in IT and beyond over the last two decades: it has shown that individuals, working together over the Internet, can create products that rival and sometimes beat those of giant corporations; it has shown how giant corporations themselves, and Governments, can become more innovative, more agile and more cost-effective by building on the fruits of community work; and from its IT base the Open Source movement has given leadership to new thinking about intellectual property rights and the availability of information for re-use by others.

This Government has long had the policy, last formally articulated in 2004, that it should seek to use Open Source where it gave the best value for money to the taxpayer in delivering public services. While we have always respected the long-held beliefs of those who think that governments should favour Open Source on principle, we have always taken the view that the main test should be what is best value for the taxpayer.

Over the past five years many government departments have shown that Open Source <u>can</u> be best for the taxpayer – in our web services, in the NHS and in other vital public services.

But we need to increase the pace:

(1) We want to ensure that we continue to use the best possible solutions for public services at the best value for money; and that we pay a fair price for what we have to buy.

(2) We want to share and re-use what the taxpayer has already purchased across the public sector – not just to avoid paying twice, but to reduce risks and to drive common, joined up solutions to the common needs of government.

(3) We want to encourage innovation and innovators - inside Government by encouraging open source thinking, and outside Government by helping to develop a vibrant market.

(4) We want to give leadership to the IT industry and to the wider economy to benefit from the information we generate and the software we develop in Government

So we consider that the time is now right to build on our record of fairness and achievement and to take further positive action to ensure that Open Source products are fully and fairly considered throughout government IT; to ensure that we specify our requirements and publish our data in terms of Open Standards; and that we seek the same degree of flexibility in our commercial relationships with proprietary software suppliers as are inherent in the open source world.

This open source strategy addresses these key points. It sets out the steps we need to take across Government, and with our IT suppliers, to take advantage of the benefits of open source.

Tom Watson MP
Minister for Digital Engagement

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1. The Government last formally reviewed its Open Source policy in 2004 [1]. The policy made clear that the Government would consider open source solutions alongside proprietary ones in IT Procurements and that contracts will be awarded on a value for money basis.

2. Since 2004 the Government has increased its use of Open Source, particularly in operating systems and middleware components of business solutions. For example:

> (1)   50% of the main departmental websites use Apache as the core web server.

> (2)   The NHS "Spine" uses an open-sourced operating system and, when complete, the replacement of Netware by Open Enterprise Server will mean that 35% of NHS organisations covering almost 300,000 users will be supported on Linux infrastructure.

> (3)   Open Source components are used in major mission critical systems such as Directgov and Electronic Vehicle Licensing.

3. However since 2004 the software and wider IT marketplace have also developed to make Open Source products more competitive and easier to include in enterprise business solutions. For instance:

- robust and sustainable enterprise-class business models for the implementation and support of open source solutions have emerged.

- an increasing number of major players in the IT industry are actively engaged with open source and are supporting the use of open standards.

- large enterprises, including Government departments, have started routinely to use open source components within large, mission-critical systems; as a consequence the different commercial, cost, licensing and risk models are better understood among enterprise CIOs.

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[1] Use of Open Source Software: Use within UK Government, version 2. Cabinet Office/OGC, 28 October 2004

4. There have also been developments in the approach to Government IT which affect the approach to Open Source:

* The creation of the Government IT profession and the open recruitment of technology professionals into government has re-established skills and cultures for a more open challenge to suppliers about technology solutions.

* The establishment of the CIO Council has led to more openness and exchange of information about good IT solutions and experience within Government. There is greater willingness and there are mature service frameworks to re-use more of the Government's existing IT assets. Open Source and Open Standards are able to make an important contribution to making this happen.

* The agreement to the Cross Government Enterprise Architecture framework and its acceptance by the Government's major IT suppliers has enabled the disaggregation of 'closed' business solutions into component requirements. This which allows sharing and re-using of common components between different lines of business.

* The licensing policies of software suppliers, particularly where government is not treated as a single entity, and the lack of cost transparency in the supply chain, have created issues in the progress towards greater cost reduction and joining-up of services across government.

* Some major departments have now established 'ecosystems' which allow the use of a wider range of IT suppliers within an overall service provision partnership.

* The techniques and cultures of open source have been adopted in other parts of Government business, for instance in the public consultation on the DIUS Science White Paper and the work of the Cabinet Office's Power of Information Task Force.

The Way Forward

5. The Government considers that in order to deliver its key objectives a programme of positive action is now needed to ensure that there is an effective 'level playing field' between open source and proprietary software and to realise the potential contribution open source software can make to wider aims of re-use and open standards. This programme needs to consist both of a more detailed statement of policies and of practical actions by government and its suppliers. The key objectives will be to:

(1) ensure that the Government adopts open standards and uses these to communicate with the citizens and businesses that have adopted open source solutions

(2)   ensure that open source solutions are considered properly and, where they deliver best value for money (taking into account other advantages, such as re-use and flexibility) are selected for Government business solutions.

(3)   strengthen the skills, experience and capabilities within Government and in its suppliers to use open source to greatest advantage.

(4)   embed an 'open source' culture of sharing, re-use and collaborative development across Government and its suppliers, building on the re-use policies and processes already agreed within the CIO Council, and in doing so seek to stimulate innovation, reduce cost and risk, and improve speed to market.

(5)   ensure that there are no procedural barriers to the adoption of open source products within government, paying particular regard to the different business models and supply chain relationships involved.

(6)   ensure that systems integrators and proprietary software suppliers demonstrate the same flexibility and ability to re-use their solutions and products as is inherent in open source.

Policy

6. The Government's policy is as follows:

Open Source Software

(1) The Government will actively and fairly consider open source solutions alongside proprietary ones in making procurement decisions,

(2) Procurement decisions will be made on the basis on the best value for money solution to the business requirement, taking account of total lifetime cost of ownership of the solution, including exit and transition costs, after ensuring that solutions fulfil minimum and essential capability, security, scalability, transferability, support and manageability requirements.

(3) The Government will expect those putting forward IT solutions to develop where necessary a suitable mix of open source and proprietary products to ensure that the best possible overall solution can be considered.

(4) Where there is no significant overall cost difference between open and non-open source products, open source will be selected on the basis of its additional inherent flexibility.

Non-Open Source Software

(5) The Government will, wherever possible, avoid becoming locked in to proprietary software. In particular it will take exit, rebid and rebuild costs into account in procurement decisions and will require those proposing proprietary software to specify how exit would be achieved.

(6) Where non open source products need to be purchased, Government will expect licences to be available for all public sector use and for licences already purchased to be transferable within the public sector without further cost or limitation. The Government will where appropriate seek pan-government agreements with software suppliers which ensure that government is treated as a single entity for the purposes of volume discounts and transferability of licences.

Open Standards

(7) The Government will use open standards in its procurement specifications and require solutions to comply with open standards. The Government will support the development of open standards and specifications.

Re-Use

(8) The Government will look to secure full rights to bespoke software code or customisations of commercial off the shelf products it procures, so as to enable straightforward re-use elsewhere in the public sector. Where appropriate, general purpose software developed for government will be released on an open source basis.

(9) Where the public sector already owns a system, design or architecture the Government will expect it to be reused and that commercial arrangements will recognise this. Where new development is proposed, suppliers will be required to warrant that they have not developed or produced something comparable, in whole or in part, for the public sector in the past, or where they have, to show how this is reflected in reduced costs, risks and timescale.

(10) When suppliers are proposing a third party product there should be full price transparency. If there is a pan-Government agreement there should be the option to source through this where doing so would maximise overall public sector value. The Government will expect to be charged only the cost the supplier incurs unless the supplier can clearly and transparently provide evidence of the additional value created.

Action Plan

7. The key **actions** for Government are therefore:

Action 1: Clarity in procurement: The CIO Council, with the Office for Government Commerce, will develop clear and open guidance for ensuring that open source and proprietary products are considered equally and systematically for value for money. This guidance will be published and will include:

(a)   the specification and evaluation of compliance with open standards and of potential for re-use across the public sector.

(b)   a standard form of words for Statements of Requirements to state positively that the Government's policy is to consider open source solutions on their merits according to total lifetime cost of ownership.

(c)   authoritative advice for public sector purchasers to the particular licensing, warranty and indemnity issues associated with open source.

Action 2: Increasing capability within Government: The CIO Council and the OGC, working with industry and drawing on best practice from other countries, will institute a programme of education and capability-building for the Government IT and Procurement professions on the skills needed to evaluate and make the best use of open source solutions . The aim will be to raise the level of awareness, skills and confidence in the professions in the different licensing, support, commercial and cost models associated with open source solutions.

Action 3: Re-use as a practical principle: Learning from others is a key aspect of the CIO Council's operating principles. Where open source solutions are evaluated and approved by one part of Government, that evaluation should not be repeated but should be shared.   To support this, Departments will keep and share records of their approval and use of open source, including open source components within composite solutions.

Action 4: Maturity and sustainability: Open source software covers a multitude of products. Given the nature of Government work, a degree of confidence that a product is mature, that the code base is secure, that the project itself is sustainable is needed. The CIO Council will regularly assess products for maturity and recommend a list of products and implementations that meet agreed criteria.

Action 5: Supplier Challenge: Building on the actions above, Government Departments will challenge their suppliers to demonstrate that they have capability in open source and that open source products have been actively considered in whole or as part of the business solution which they are proposing. Where no overall open source solution is available suppliers will be expected to have considered the use of open source products within the overall solution to optimise the cost of ownership. Particular scrutiny will be directed where mature open source products exist and have already been used elsewhere in government. Suppliers putting forward non-open source products will be asked to provide evidence that they have carefully considered open source alternatives and to explain why they have been rejected.

Action 6: *International examples and policies, and keeping up to date with developments*: The UK Government will actively seek examples from other countries and sectors to encourage the development of product knowledge and better to challenge suppliers. The UK will actively engage in the development of policies across the EU and internationally.

Action 7: *Industry/Government joint working:* The CIO Council will work with systems integrators and software suppliers to open up their solutions to meet open standards, to include open source, and to facilitate re-use. The Government will encourage and facilitate closer links between open source providers (including organisations which provide support for open source) and system integrators. The Government will share with industry information about current deployments of open source and testing already performed so that knowledge can be re-used.

Action 8: *Open Standards:* The Government will specify requirements by reference to open standards and require compliance with open standards in solutions where feasible. It will support the use of Open Document Format (ISO/IEC 26300:2006) as well as emerging open versions of previously proprietary standards (eg ISO 19005-1:2005 ("PDF") and ISO/IEC 29500 ("Office Open XML formats")). It will work to ensure that government information is available in open formats, and it will make this a required standard for government websites.

Action 9: *Open Source techniques and re-use within Government, and appropriate release of code:* Government purchasers will use a standard OGC-approved OJEU clause to make clear that solutions are purchased on the basis that they may be re-used elsewhere in the public sector. The OGC Standard Contract Clauses will contain a clause to ensure that the government secures full rights to bespoke software code or customisations of commercial off the shelf products it procures, and that it is clear that these rights cover re-use anywhere else in the public sector and the ability to release the code on an open-source basis. Where appropriate, general purpose software developed by or for government will be released on an open source basis.

Action 10: *Communication, Consultation and Review:* Government will communicate this policy and its associated actions widely and will expand it as necessary. It will engage with the Open Source community and actively encourage projects that might, in due course, develop into 'Government Class' products. It will keep the policy and progress on the actions under review, and report on progress publicly.

Comments

To help bring together the online debate around this Action Plan, we've set up a public page which contains links to blog posts, news stories and tweets about UK government, open source and open standards: http://www.netvibes.com/cabinetoffice#Open_Source. If you write about this online, please use the tag #ukgovOSS to help us find your comment.