Evolving Government Policies on Free Software



Disclaimer: This is not a systematic overview or a comprehensive overview

Oh, and something about these being my views and not the views of my employer.







Desktops come and go



Desktops come and go



Software

Munich's mayor claims €4m savings from Linux switch

Lower costs and fewer support calls than Windows

By Iain Thomson in San Francisco 29 Mar 2012 at 19:24 123 🖵 SHARE 🔻



Desktops come and go



Software

Munich council: To hell with Linux, we're going full Windows in 2020

Never go full Windows

By Andrew Silver 13 Nov 2017 at 09:09

480 🖵 SHARE 🔻



Adios Microsoft: We're ditching Office and Outlook for open source, says Barcelona

The city council plans to continue using Windows in the short-term, but for "all desktop applications to be open-source", including office suites, web browsers and email clients.

CivicActions

By Nick Heath 🔰 | January 16, 2018, 4:26 AM PST

Digital 5

1. Formed in 2014 with 5 countries

South Korea; United Kingdom; Estonia; New Zealand; & Israel

- 2. First conference in London in 2014
- 3. This year was Wellington in February
- 4. Two countries joined recently Canada & Uruguay

Digital 5

"The Participants have mutually agreed to found the D5, a group of the most digitally advanced governments in the world. The D5 will provide a focused forum to **share best practice**, identify how to improve the Participants' **digital services**, collaborate on **common projects** and to support and champion our **growing digital economies**."

§ 2 D5 Charter



Principles of digital development

- 3.1. User needs
- 3.2. Open standards
- 3.3. Open source
- 3.4. Open markets
- 3.5. Open government (transparency)

3.6. Connectivity

- 3.7. Teach children to code
- 3.8. Assisted digital
- 3.9. Commitment to share

and learn

§ 3 D5 Charter

CivicActions

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§ 3 D5 Charter

CivicActions

Role of free software

3.3. Open source - future Government systems, tradecraft, manuals and standards are created as open source and are **shareable between members**

§ 3 D5 Charter



United Kingdom

- Founded the D5 group in 2014
- Requires custom developed solutions to be licensable as free software
- Actively shares source code
- Includes guidance in digital Service Manual





U.K. Digital Service Standard

"8. Make all new source code open

Make all new source code open and reusable, and **publish it under appropriate licences** (or provide a convincing explanation as to why this can't be done for specific subsets of the source code)."

Digital Service Standard, available at https://www.gov.uk/service-manual/service-standard



U.K. Digital Service Standard

"How point 8 improves your service

Making your source code open means:

- other services can **reuse** the software you've created
- other services don't end up doing work you've already done and you reduce costs in government as a whole
- you avoid starting technology contracts that you can't end easily"

Digital Service Standard, available at

https://www.gov.uk/service-manual/service-standard/make-all-new-source-code-open



U.K. Digital Service Standard Assessment

To pass, you usually need to:

- explain how you're making new source code open and reusable
- show your code in an open internet source code repository
- describe how you accept contributions and comments on the code
- explain how you're handling updates and bug fixes to the code
- explain the licences you're using to release code
- confirm that you own the intellectual property
- explain the code you've not made open and why
- explain how a team in another department can reuse your code

Digital Service Standard, available at

https://www.gov.uk/service-manual/service-standard/make-all-new-source-code-open



U.K. Digital Service Standard *Licensing your code*

"You should **publish your code** under an Open Source Initiative compatible licence. For example, GDS uses the MIT licence."

Digital Service Standard, available at https://www.gov.uk/service-manual/service-standar d/make-all-new-source-code-open



N.Z. Government Open Access and Licensing framework

"NZGOAL seeks to foster a **culture of sharing** of government material for re-use by others. If applied by agencies as expected, it can:

- help people by enabling them to re-use government material for their own purposes, whether economic, environmental, creative or cultural, in the knowledge they may do so legally; and
- help government by encouraging experts and others to contribute to improved policy development and more efficient financial performance by government."

https://www.ict.govt.nz/guidance-and-resources/open-government/new-zealand-government-open-access-a nd-licensing-nzgoal-framework/guick-guide-users/ LibrePlanet '18 | Government Free Software Policies | Marc Jones | @CIVICACTIONS CivicActions

N.Z. Government Open Access and Licensing framework

- "There are six different Creative Commons licences. NZGOAL states that, unless a restriction applies, agencies should make useful copyright works available for re-use using the most open (i.e., the most permissive) form of Creative Commons licence."
- "NZGOAL does also not apply to software ... (preferring, instead, various open source software licences)."

https://www.ict.govt.nz/guidance-and-resources/open-government/new-zealand-government-open-access-a nd-licensing-nzgoal-framework/quick-guide-users/



"Free and open source software and licences 3. For the purposes of NZGOAL-SE, free and open source software (FOSS) is software source code that is released on licence terms that grant others the freedom to use, copy, modify and distribute the software, for either non-commercial or commercial purposes, as long as they comply with the applicable licensing conditions."

https://www.ict.govt.nz/guidance-and-resources/open-government/new-zealand-government-open-access-a nd-licensing-nzgoal-framework/nzgoal-se/



- Default rule is vendors own the copyright in custom code
- The default can be overridden if the Government wants to release it as free software!

https://www.ict.govt.nz/guidance-and-resources/open-government/new-zealand-government-open-access-a nd-licensing-nzgoal-framework/nzgoal-se/



14. If ... agencies have the ... rights to do so, and wish to license their software source code for re-use, they **are encouraged**:(a) to consider making their source code, that is or may be of interest or use to people, available for re-use under a FOSS licence

https://www.ict.govt.nz/guidance-and-resources/open-government/new-zealand-government-open-access-a nd-licensing-nzgoal-framework/nzgoal-se/

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"15 For the purposes of NZGOAL-SE, the **recommended set of free and open source software licences** for which selection guidance is provided are:

(a) **the MIT licence**: this is a more permissive licence in the sense that it does not contain a sharealike obligation . . .; and

(b) *the GPL licence*: this is sharealike/copyleft licence that requires those who adapt the source code to release their adaptations on the same terms if they distribute them"

https://www.ict.govt.nz/guidance-and-resources/open-government/new-zealand-government-open-access-a nd-licensing-nzgoal-framework/nzgoal-se/ LibrePlanet '18 | Government Free Software Policies | Marc Jones | @CIVICACTIONS CivicActions

NZGOAL Software Extension Entirely new source code - default FOSS licences

"64. NZGOAL-SE suggests that an agency's choice . . . should turn on the answer to this simple question: **would you like everyone to be able to re-use other people's distributed adaptations** of the source code in the future?

65. If the answer to this question is yes . . . then the agency **should select the GPL** (version 3)."

https://www.ict.govt.nz/guidance-and-resources/open-government/new-zealand-government-open-access-a nd-licensing-nzgoal-framework/nzgoal-se/

Israel

- Israel included a free software commitment in its current Open Government Action Plan as part of the Open Government Partnership
- Schedule to publish a directive for the "adoption, use, and return of open-source code" this month

"3. Encouraging and promoting the **policy of using open-source** code by government ministries.

4. Promoting making government code **publicly accessible** that is **not obligated** under an open-code license."

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https://www.opengovpartnership.org/documents/israel-action-plan-2017-2019

Israel

- EU's Open Source Observatory report that Israel shared its first free software in November
- Shared extensions to its CKAN open data repository
- Information and Communication Technology Authority working on free software policy with the assistance of the ministry of Finance

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• Why did they release the code before the policy was finished?

Israel

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- Information and Communication Technology Authority working on free software policy with the assistance of the ministry of Finance
- Why did they release the code before the policy was finished?
- Code released in response to a demand letter (CKAN is AGPL)

https://joinup.ec.europa.eu/news/hebrew-open-data-portal

European Commission

"The use of open source software technologies and products can help save development cost, avoid a lock-in effect and allow fast adaptation to specific business needs because the developer communities that support them are constantly adapting them. Public administrations should not only use open source software but whenever possible contribute to the pertinent developer communities. Open source is an enabler of the underlying EIF principle on reusability"

New European Interoperability Framework, https://ec.europa.eu/isa2/eif_en

Code Sharing

European Commission



https://joinup.ec.europa.eu/



Code Sharing Spain

GOBIERNO DE ESPANA	portal administración electrónica	C
Current /ou are in: <u>Start</u> > - CTT solutions	Strategies - CTT solutions - OBSAE observatory Document	entation Organization
- CTT solutions	Centro de Transferencia de Tecnología	administracion.gob.es punto de acceso general
CTT now	Image: Second Secon	Prominent CTT
Solutions by technical area Solutions by functional area		Soporte CTT
Solutions for organic Area		 Collaborative and CTT More than 2,500 Local Entitie connected in the network system records (SIR)
Solutions finder Federated search engine		 Deployed new version of Archive v1.2.5.5 AIREF makes use of the
Forge CTT		solution ACCESSES to its headquarters electronics Enters into force version 3.2.2 virtual format
Search for a solution		Public hearing on R.D. that regulates the reuse of public Sector information State



Code Sharing

United States



https://forge.mil/

https://code.gov/

Federal Government

Federal Source Code Policy

M-16-21 - Memorandum For The Heads Of Departments And Agencies

- All custom code must include government purpose rights
- Requires the release of at least 20% of custom developed code
- Established code.gov

5.2 Participation in the Open Source Community

develop and release the code in a manner that

- 1. fosters communities around **shared challenges**,
- 2. improves the ability of the OSS community to provide feedback on, and make contributions to, the source code, and
- 3. encourages Federal employees and contractors to **contribute back** to the broader OSS community by making contributions to existing OSS projects.

https://sourcecode.cio.gov/



Federal Government

Federal Source Code Policy

- 25 Departments tracked
- 18 partially compliant
- 11 Partially compliant at least have a FOSS policy
- 3 fully compliant (including GSA)
- 4 non-compliant (including DOD)

Partial Compliance

- 1. Policy being updated
- 2. Released 10% of their custom developed code.
- 3. Agency has inventoried more than 50% of new custom code.

https://code.gov/#/policy-guide/docs/compliance/dashboard



Federal Government

Licensing

Selection Considerations

- "Using OSI popular licenses may maximize the interoperability of your ... license with other open source code"
- "Choose licenses that do not place unnecessary restrictions on the code ..."
- "Avoid the creation of ad hoc licenses to prevent uncertainty in the minds of contributors ..."

nttps://code.gov/#/policy-guide/docs/open-source/licensing

Example Licenses

- Apache v2
 - NSA, HHS
- GNU GPL
 - Energy, EPA
- Creative Commons Zero
 - Treasury, GSA, FDA

State Government - Agile

California Agile Vendor Pool

- Created after Code for America criticized award one large award to replace aging state IT system
 - Pool of vendors to bid on a series of small contracts
- Required Vendors to have experience with
 - "open source database"
 - "Default to Open"
 - "Consider [free] software solutions at every layer of the stack"
 - Identifying what components are made available as FOSS
 - Hire team members using and creating free software
- Contract says "The Contractor shall use open source software wherever possible"



Mississippi Agile Vendor Pool

RFP No. 3717 – Agile Development Services

"28.1 Open Source

The Vendor shall **use open source technologies wherever possible**. Additionally, any work produced shall be committed to the public domain as open source products. All licenses must be expressly listed in the deliverable. Regardless of license(s) used (e.g., MIT, *GPL*, Creative Commons 0) the license(s) shall be clearly listed in the documentation."



Mississippi Agile Vendor Pool

RFP No. 3717 – Agile Development Services

"11.6 If the Vendor needs to use work that does not have an open source license, the Vendor is *required to request permission* from CPS, in writing, before utilizing that work in any way in connection with the LOC."

"11.7 If an open source license provides implementation guidance, the Vendor shall **ensure compliance with that guidance**."



State Government

Legislation - Federal

- H.R. 2627: Enhancing Overseas Traveler Vetting Act
 - Rep. Will Hurd for Texas (R)
- H.Res. 334: Expressing the sense of the House of Representatives regarding grid modernization.
 - Rep. Jerry McNerney for California (D)
- S. 1443: Department of Defense Software Management Improvement Act of 2017
 - Sen. Mike Rounds of South Dakota (R)
- S. 1519: National Defense Authorization Act for Fiscal Year 2018
 - Committee Bill
- H.R. 2810: National Defense Authorization Act for Fiscal Year 2018
 - Enacted into law
- H.R. 5036: Financial Technology Protection Act
 - Rep. Ted Budd for North Carolina (R)
- H.R. 5147: Securing America's Elections Act of 2018
 - Rep. Tulsi Gabbard for Hawaii (D)



State Government

Legislation - State

- HI SB2902 Relating To Technology Development. (Prize) Democratic bill passed house last year but carried over
- MA H100/MA S54 For legislation to create a means for tracking...
 Democratic bill in Committee
- MA H1829 Relative to autonomous vehicle access to the public ways. Democratic bill stalled in committee
- MS HB1429 MS Statewide Open Source Software Law Republican bill died in Committee
- NH HB1622 Relative to organization of the department of IT. Bipartisan bill to remove "open source" language
- NY A04521 Provides a maximum \$200 tax credit

Democratic bill in Committee

• OK SB105 State information technology; modifying duties of CIO. Republican bill Passed



Conclusions

- 1. Cities come and go
- 2. Free software is connected with
 - a. transparency and open data
 - b. agile project management
 - c. modern software development
 - d. lower costs because of
 - i. vendor independence
 - ii. reusability

- 3. Legislatures do not see the connection with freedom
- 4. Being pushed by Digital Services
- 5. Copyleft is not favored
 - a. But not out of the running

Things we can do

- 1. Go work for the government, become a bureaucrat
- Tell them Free Software solutions exist: NH doesnt think any Free 4. software exists apparently https://www.nh.gov/doit/open-source/5. data-software.htm
- 3. Use the code that governments are publishing
 - a. Contribute back
 - 4. Support Free software that is being used by Government
 - Go work for a company making free software for governments and show them how to do it right

Thank you.

