



Open Sourcing GC Code

My Journey at ESDC



Canada's 'super secret spy agency' is releasing a malware-fighting tool to the public



'This is something new for CSE,' says the agency, which is trying to shed its old reputation



Matthew Braga · CBC News · Posted: Oct 19, 2017 8:55 AM ET | Last Updated: October 19, 2017

ASSEMBLY  LOVE





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Following



The **#GC** must take an “open first” approach to web development using open source tools and create an open culture that co-develops, re-uses and shares

#ExponentialGrowth #GCDigital #OpenFirst

Comment here:



canada-ca/Open_First_Whitepaper

Open First Whitepaper - Livre blanc ouvert en premier - canada-ca/Open_First_Whitepaper

github.com

2:36 PM - 20 Nov 2017



Principle 2: Open

GC Employees work “in the Open”

Government of Canada Strategic Plan for Information Management and Information Technology
2017 to 2021



The Answer

The authority to apply a license to Crown Copyright sits at the Deputy Minister.

Where copyright belongs to Her Majesty

12 Without prejudice to any rights or privileges of the **Crown**, where any work is, or has been, prepared or published by or under the direction or control of Her Majesty or any government department, the copyright in the work shall, subject to any agreement with the author, belong to Her Majesty and in that case shall continue for the remainder of the calendar year of the first publication of the work and for a period of fifty years following the end of that calendar year.

- R.S., 1985, c. C-42, s. 12;
- 1993, c. 44, s. 60.

Assignments and licences

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What is Source Code?

The instructions that tell a computer what to do.

What is Open Source Code?

“... Open Source (code) is (source code) that can be freely accessed, used, changed*, and shared (in modified* or unmodified form) by anyone. Open source (code) is made by many people, and distributed under licenses that comply with the [Open Source Definition](#).”

- Open Source Initiative

*There is a gatekeeper for accepting modified code. This does not mean anyone can modify our software willy-nilly



The MIT License

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Why Would You Want to Open Source Your Work?



Why Would You Want to Open Source Your Work?

Treasury Board Secretariat (TBS) wants us to do it



Why Would You Want to Open Source Your Work?

Transparency

- creates greater transparency and accountability

Public Benefits

- drives innovation and economic opportunities

Collaboration to Lower Development Costs

- encourages external contributions from governments, companies, students and citizens in the form of source code, bugs and documentation

Long-term Feasibility

- Releasing software as OSS to encourage others to collaborate on it can also help ensure the viability of a project into the future.

Reputation Building

- Participation in OSS can help build a positive reputation amongst other developers and amongst OSS users.



Why Would You Want to Open Source Your Work?

Open source attracts talent

50% (of respondents) said their company's participation in open source software projects helps them find and recruit top talent.

[2015 Future of Open Source Survey](#), [Black Duck Software](#)

...it makes it easier to attract the top talent. "It's not all altruism, there's solid business sense behind this."

James Pearce - Facebook



Why Would You Want to Open Source Your Work?

Companies give away free software and services to support Open Source Software

- Version Control
- Project Hosting
- Public Cloud
- Continuous Integration/Continuous Deployment Tools
- Testing Tools
- Monitoring, IDEs
- And more...



Why Would You Want to Open Source Your Work?

One less Access to Information and Privacy (ATIP) request to worry about.

Save a citizen 5 dollars.

Save your future self/team from having to assess your stuff.



Why Would You Not Want to Open Source Your Work?



Why Would You Not Want to Open Source Your Work?

Your code is considered classified

- Software of National Security Value (SECRET, and TOP SECRET)
- Fraud Detection algorithms.

Your department wants to make money off of it.*

* and has the authority to do so, or a plan to get authority to do so.



Share Internally

Even if you don't share to the public think about sharing your code internally through **GCCode**



What Does It Mean to Work in the Open?



What Does It Mean to Work in the Open?

Introduce rigorous security controls

- Code Reviews (Peer and Automated)
- Automated Tests and Scans (Unit, E2E, Security, Dependency Scanning, Secret Scanning)
- 2FA for Source Code Platform (Yubikey, Google Authenticator, etc..)
- SECURITY.md - Documents controls, and how to secure service.

Security Disclosure Policy

Offer users a mechanism to report bugs and issues, and be responsive to these reports.

Accidental Credential Disclosure Policy

Come up with a procedure to follow when you accidentally disclose a secret of some kind.



What Does It Mean to Work in the Open?

Contribution Policy

Publish a policy on how to contribute to the project.

Share it

Let people know about it.

Share on the Open Resource Exchange

<https://canada-ca.github.io/ore-ero/open-source-code.html>

Get your Departments Communication Teams to share it.



Who to Engage in Your Organization?



Who to Engage in Your Organization?

These folks probably have something to add.

- Intellectual Property
- Legal
- IT Security
- Communications

These groups probably don't have a stake but might want to engage them anyway

- Privacy
- IT Asset Management



Where Do I Go from Here?



Where Do I Go from Here?

1. Document my justification
2. Get approval from DG
3. Celebrate
4. Create a Framework for applying an Open Source License at ESDC



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Q&A



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