

# Open Standards and Open Source Software

in the Government of Canada

OSSNA Vancouver  
2018-08-31 - Sébastien Lemay



**Government  
of Canada**

**Gouvernement  
du Canada**

# Me – Sébastien Lemay

- FOSS User and Advocate
- Sysadmin, Developer, Strategic Partnerships
- @smellems
- DND, PCH, ..



## Open Source Software and Strategic Partnerships

Treasury Board of Canada Secretariat  
Gatineau, Qc.

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🌐 <https://www.smellems.com>



# Treasury Board of Canada Secretariat (TBS)

- Chief Information Officer (CIO) Branch
  - Set standards for GC IM-IT and Digital
  - Office of the Chief Technology Officer (CTO)
    - Digital Collaboration Division (Digital Workspace)
    - Enterprise Architecture
  - Open Government, OneGC, ..
- Minister of Digital Government
- CIO : Open by Default

# History of OSS in the GC

- 2002 - GOSLInG
- 2004 - Neutral Position on OSS
  - Federated Architecture Program
- 2009 - CIOC business case for effective use of OSS
  - Web browser and desktop utilities
- 2012 - NRCan FOSS Licensing Primer & NRC OSS Guidelines



**GOSLING  
OISILLON**

# Open Government Portal

<https://open.canada.ca>

- Open Data & Open Information
- Open Dialog
  - Blogs, consultations
- Runs on OSS
  - CKAN, Drupal, Solr

<https://github.com/open-data>



# GCTools

- Started 2008
- Interdepartmental Collaboration Tools
  - Colleagues, Groups, Blogs, Discussions, Pages, ..
- Enable communities
- GCpedia and GCconnex
  - MediaWiki and Elgg
- Work in the open - Agile dev and UX team
- Digital Collaboration Division

<https://github.com/gctools-outilsgc>

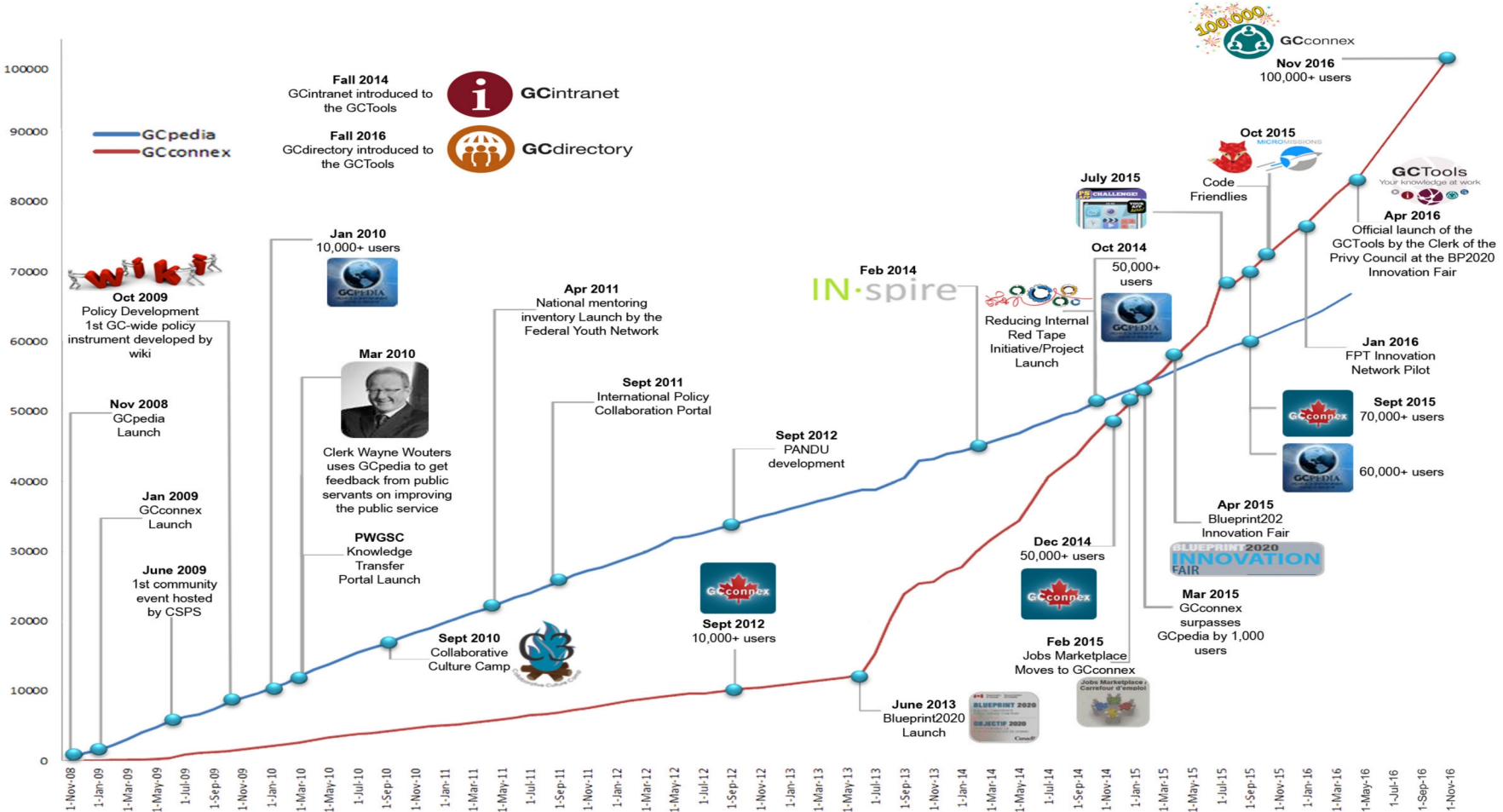


# Blueprint 2020

- Started 2013
- Principles
  - An open and networked environment
  - A whole-of-government approach
  - A modern workplace that makes smart use of new technologies
  - A capable, confident and high-performing workforce that embraces change
- Innovation
- Dragons' Dens
- Digital



# Blueprint 2020 Effect



**Oct 2009**  
 Policy Development  
 1st GC-wide policy instrument developed by wiki

**Nov 2008**  
 GCpedia Launch

**Jan 2009**  
 GCconnex Launch

**June 2009**  
 1st community event hosted by CSPS

**Jan 2010**  
 10,000+ users



**Mar 2010**



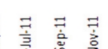
Clerk Wayne Wouters uses GCpedia to get feedback from public servants on improving the public service

**PWGSC**  
 Knowledge Transfer Portal Launch

**Sept 2010**  
 Collaborative Culture Camp



**Sept 2011**  
 International Policy Collaboration Portal



**GCintranet**



**GCdirectory**

**Fall 2014**  
 GCintranet introduced to the GCtools

**Fall 2016**  
 GCdirectory introduced to the GCtools

**Feb 2014**  
 IN·spire



Reducing Internal Red Tape Initiative/Project Launch

**July 2015**  
 Code Friendlies



**Oct 2014**  
 50,000+ users



**Dec 2014**  
 50,000+ users



**Feb 2015**  
 Jobs Marketplace Moves to GCconnex



**Mar 2015**  
 GCconnex surpasses GCpedia by 1,000 users



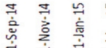
**Apr 2015**  
 Blueprint2020 Innovation Fair



**Sept 2015**  
 70,000+ users



**Jan 2016**  
 FPT Innovation Network Pilot



**100,000**



**GCconnex**

**Nov 2016**  
 100,000+ users



**GCtools**  
 Your knowledge at work

**Oct 2015**  
 Code Friendlies



**Apr 2016**  
 Official launch of the GCtools by the Clerk of the Privy Council at the BP2020 Innovation Fair



**Jan 2016**  
 FPT Innovation Network Pilot



**Sept 2015**  
 70,000+ users



**Apr 2015**  
 Blueprint2020 Innovation Fair



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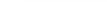
**Feb 2015**  
 Jobs Marketplace Moves to GCconnex



**Dec 2014**  
 50,000+ users



**Oct 2014**  
 50,000+ users





# Web Experience Toolkit (WxT)

- Started in 2013
- Front-end framework for building websites
  - accessible, usable, interoperable, mobile friendly and multilingual
- Flexible and themeable templates and reusable components
  - GCweb/Intranet themes
- Open source project led by the Government of Canada

<https://github.com/wet-boew>



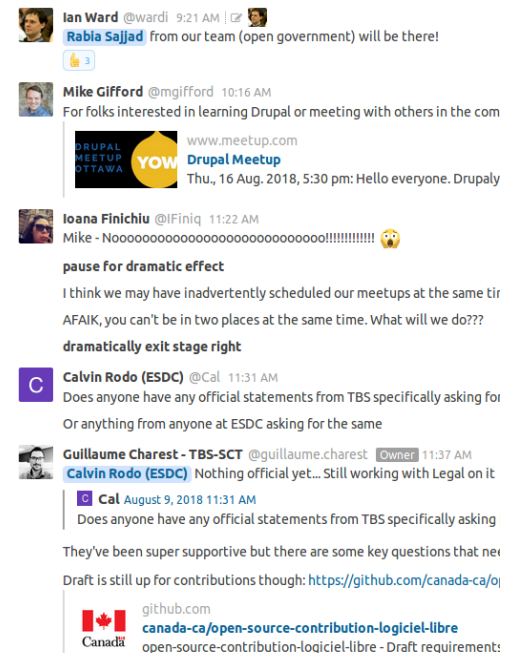
# GC FOSS community

- GCpedia, GCconnex, GCcollab, Message
- SSC AGORA meetups



The screenshot shows the profile page for the "Open Source Software" group. The profile picture is a green circular logo with a white keyhole shape. The group name is "Open Source Software" and the owner is "David Sampson". There are 1074 group members. Below the name are several tags: "Interoperability", "Interopérabilité", "Open standards", "Normes ouvertes", "Open Source Software", and "Logic". The page has tabs for "About", "Discussion", "Files", "Blog", and "More". A banner below the tabs says "Ce contenu est aussi disponible en Français". The "Description" section states: "A network of advocates and users of Free and Open Source Software (OSS) in the Government of Canada." Below the description is a list of links:

- [Treasury Board Secretariat's position on Open Source Software](#)
- [CIO Sub-Committee on Open Source](#)
- [Open Source Software \(GCpedia\)](#)
- [Wikipedia: Open Source \(www\)](#)



The screenshot shows a Twitter thread. The first tweet is from Ian Ward (@wardi) at 9:21 AM, mentioning Rabia Sajjad from the team (open government) will be there. The second tweet is from Mike Gifford (@mgifford) at 10:16 AM, mentioning a Drupal Meetup in Ottawa on Thursday, 16 Aug. 2018, at 5:30 pm. The third tweet is from Ioana Finichiu (@IFiniq) at 11:22 AM, mentioning a dramatic effect. The fourth tweet is from Calvin Rodo (ESDC) @Cal at 11:31 AM, asking for official statements from TBS. The fifth tweet is from Guillaume Charest - TBS-SCT (@guillaume.charest) at 11:37 AM, mentioning Calvin Rodo (ESDC) and asking for official statements. The sixth tweet is from Cal at August 9, 2018 11:31 AM, asking for official statements. The thread ends with a link to a GitHub repository: <https://github.com/canada-ca/open-source-contribution-logiciel-libre>.

# Open Government

- Foster greater transparency and accountability
- Cost-effective, efficient, and responsive government
- Open Data, Open Information, Open Dialog
- Open by Default!
  - Working in the Open
  - Open standards and OSS



# Open Government Partnership (OGP)

2012 - Became Member

2017 - Elected to Steering Committee

2019 - Hosting the OGP Global Summit in Ottawa

## **Commitments**

<https://www.opengovpartnership.org/countries/canada>

# 4<sup>th</sup> Plan on Open Government : 2018-20

- Biennial plans for OGP
  - Consultations ended August 13<sup>th</sup> 2018

## Commitment on Digital Government and Services

- “Prioritize open source code in development and procurement of digital solutions”



# Digital Government

- New (first) Minister of Digital Government
- Great government services
  - Any service; Any platform; Any device; Any partner
- Improve the lives of citizens.
  - User-centric design - shape services to their needs
  - Agility - try new things, to learn as you go
  - Working in the open - the more you share, the more you gain

# International Commitments

- Open Government Partnership
- Memorandums of Understanding
  - UK : Digital 7 Principles
  - Estonia : Digital Government
- Digital 7
  - Shares world-class digital practices
  - Identifies improvements to digital services
  - Collaborates to solve common problems
  - Supports the group's growing digital economies

The logo for the Open Government Partnership, featuring the text "Open Government Partnership" in white on a dark grey background.

Open  
Government  
Partnership



## Digital 7 Principles

User Needs  
Open Standards  
Open Source  
Open Markets  
Open Government  
Connectivity  
Teach Children to Code  
Assisted Digital  
Share and Learn.

# Strategic Plan for IM and IT 2017-2021

New planned action

**“Introduce a strategy for use of open source software and open standards”**

- Development of a strategy to set direction for the government
  - use and release of open source software
  - open standards – interoperability

<https://www.canada.ca/en/treasury-board-secretariat/services/information-technology/strategic-plan-2017-2021.html>



# Enterprise Architecture Review Board (EARB)

- Set direction and Standards
- IM-IT projects must present at EARB

## Endorsement

**“Support the formalization of a common GC-wide approach to the adoption of open source within government, resulting in a more robust open community within the GC”**

# Open First Whitepaper

- Inform EARB and TBS direction
  - Open Standards
  - Open Source Software
    - Use
    - Contribution
  - Open Markets
  - Open Culture (Organization)
- Benefits; Risks and Drawbacks; Best Practices

## **What happened?**

- Started October 2017
- 120 Stars
- 330 changes (commits)
- 26 contributors
- 55 issues with active discussions
- EARB endorsement for 1.0

[https://github.com/canada-ca/Open\\_First\\_Whitepaper](https://github.com/canada-ca/Open_First_Whitepaper)

# Business Needs

- Offer great digital services
- Working in the open by default
- Interoperability between systems
- Independence and substitutability
- Avoiding lock-in
- Attract digital talent and increase job satisfaction
- Provide public benefits to the public-at-large

# Open Ressource Exchange

- OSS used by GC
- GC OSS projects
- Provincial and municipal.
- Commitment in 4<sup>th</sup> plan on open Government

<https://canada-ca.github.io/ore-ero/>

Canadian Space Agency	<a href="#"><u>Apogy</u></a>
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City of Montreal	<a href="#"><u>CKAN-Extension-Territoire</u></a>
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Communications Security Establishment	<a href="#"><u>Assemblyline</u></a>
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Communications Security Establishment	<a href="#"><u>Spartacus</u></a>
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Environment and Climate Change Canada	<a href="#"><u>METRo</u></a>
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National Research Council Canada	<a href="#"><u>EGSnrc</u></a>
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Province of British Columbia	<a href="#"><u>Devex</u></a>
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# Digital Playbook

Practical and detailed guidance to assist the Government of Canada in digital transformation and augmented service delivery

## **Views**

– Agile, AI, Cloud, Open Gov, Architectural, Digital Standards, ..

<https://canada-ca.github.io/digital-playbook-guide-numerique>

# Digital Architectural Standards

## **Business Architecture**

- Align to the GC Business Capability model
- Design for Users First and Deliver with Multidisciplinary Teams

## **Information Architecture**

- Keep Data Organized
- Enable Interoperability

## **Application Architecture**

- *Use Open Standards and Open Source Software by Default*
- *Maximize Reuse*

## **Technology Architecture**

- Use Cloud first
- Design for Performance, Availability, and Scalability

## **Security Architecture and Privacy**

- Design for Security and Privacy
- Design Systems to be Measurable and Accountable

### 3. Application Architecture

#### Use Open Standards and Open Source Software by Default

- Use open source standards, solutions, components, and leading practices
- Enforce this order of preference: open source first, then platform-agnostic COTS, then proprietary COTS, and lastly custom-built
- Make source code open and reusable under an appropriate open source software license
- Expose public data to implement Open Data and Open Information initiatives

#### Maximize Reuse

- Leverage and reuse existing solutions, components, and processes
- Select enterprise and cluster solutions over department-specific solutions
- Achieve simplification by minimizing duplication of components and adhering to relevant standards
- Inform the GC EARB about departmental investments and innovations
- Share code publicly when appropriate, and when not, share within the Government of Canada



# More things..

- **Ethical Artificial Intelligence (AI)**
  - Code must be OSS
- **API Standard & Data Strategy**
  - Open standards
- **Digital Standards**
  - Digital Playbook
- **OneGC**
  - Any service, device, platform
- **Digital Policy**
  - Single set of rules and guidelines for departments and agencies
  - Commitment in 4th plan on open Government (2019)



# Open Accessible Digital Workspace

## *A public space for the digital age*

- Suite of integrated, multilingual & accessible tools
- Based on FOSS and open standards, the workspace connects people to each other and the information they need to work better
- By funding & contributing to new & existing open source projects, we can raise the bar for everyone
- By building together, we can create a diverse and inclusive space for all voices
- Free to use, re-use and free of advertising, forever.

# Existing Services

## Concierge (account)

<https://account.gccollab.ca>

## GCcollab (collaboration)

<https://gccollab.ca>



## Wiki (knowledge)

<https://wiki.gccollab.ca>



## Message (instant messaging)

<https://message.gccollab.ca>



# Open First Day

- September 28<sup>th</sup> 2018 - Ottawa - Online
- Executive stream
- Other streams
- Unconference
- Guillaume is here!
  
- <https://canada-ca.github.io/ofd-joep>

