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

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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

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

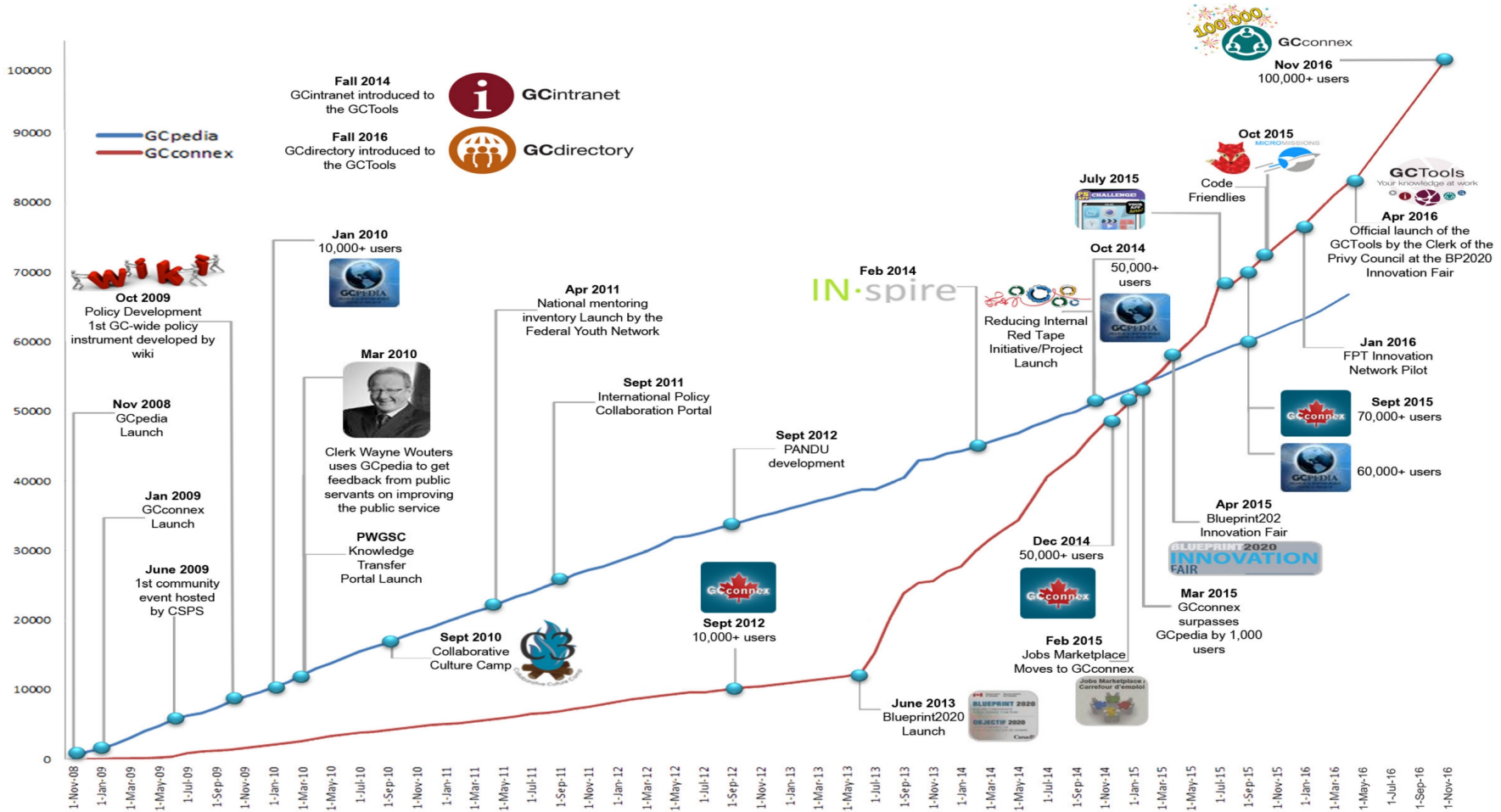
- Started 2008
- Interdepartmental Collaboration Tools
  - Colleagues, Groups, Blogs, Discussions, Pages, ..
- Enable communites
- GCpedia and GCconnex
  - MediaWiki and Elgg
- Work in the open - Agile dev and UX team
- Digital Collaboration Division

  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

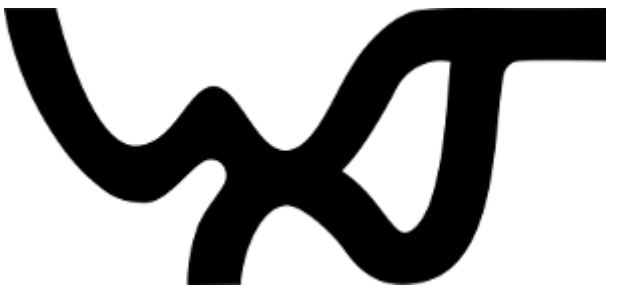
Blueprint 2020 Effect



Web Experience Toolkit (WxT)

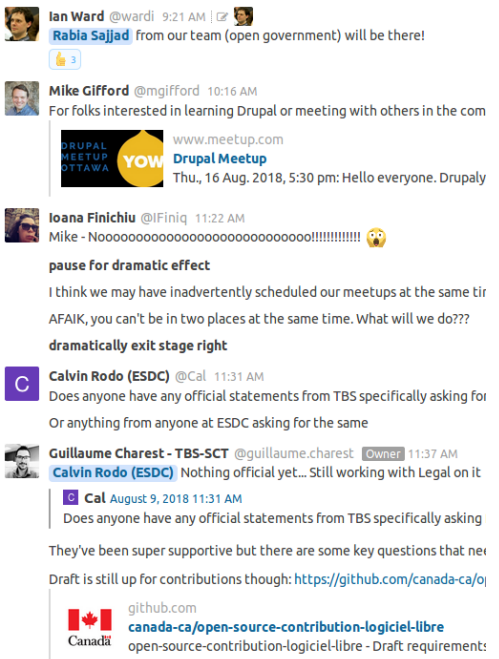
- Started in 2013
- Front-end framework for building websites
  - accessible, usable, interoperable, mobile friendly and multilingual
- Flexible and themeable templates and reusable components
  - GCweb/Intranet themes
- Open source project led by the Government of Canada

https://github.com/wet-boew



GC FOSS community

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



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 Commitee

2019 - Hosting the OGP Global Summit in Ottawa

Commitments

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

4th Plan on Open Government : 2018-20

- Biennial plans for OGP
  - Consultations ended August 13th 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

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 contribtors
- 55 issues with active discussions
- EARB endorsment for 1.0

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 4th plan on open Government

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

Canadian Space Agency	Apogy
City of Montreal	CKAN-Extension-Territoire
Communications Security Establishment	Assemblyline
Communications Security Establishment	Spartacus
Environment and Climate Change Canada	METRo
National Research Council Canada	EGSnrc
Province of British Columbia	Devex

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 28th 2018 - Ottawa - Online
- Executive stream
- Other streams
- Unconference
- Guillaume is here!

- https://canada-ca.github.io/ofd-joep