Open Standards and Open Source Software

in the Government of Canada

OSSNA Vancouver
2018-08-31 - Sébastien Lemay
Me – Sébastien Lemay

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

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
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/
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-numeriq ue
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\textsuperscript{th} 2018 - Ottawa - Online
- Executive stream
- Other streams
- Unconference
- Guillaume is here!

- \url{https://canada-ca.github.io/ofd-joep}