DIGITAL SERVICE AT CMS

The Journey to SHARE IT Act

Agenda

1. Cast of Characters
2. Legislative Timeline
3. Tooling Timeline
4. The Path Forward

Cast of Characters

- DSAC OSPO

- HHS CDO Team

- HHS SHARE IT WG

- CMS OIT SHARE IT Taskforce

- OSPO Advisory Board

- GSA code.gov team

Legislative Journey

"This bill requires federal agencies to ensure that custom-developed code (i.e., source code that is produced under an agency contract, funded exclusively by the federal government, or developed by federal employees as part of their official duties) and certain technical components of the code such as architecture designs and metadata are

(1) owned by the agency,
(2) stored at no less than one public or private repository, and
(3) accessible to federal employees under certain procedures. Agency contracts for custom-development of software must acquire and exercise rights sufficient to allow government-wide access, sharing, use, and modification of any custom-developed code.

The bill does not apply to source code that is classified, developed primarily for use in a national security system, or developed by an element of the intelligence community. An agency's office of the chief information officer may exempt source code from being shared or made publicly accessible to protect individual privacy."

Date	Chamber	All Actions
12/23/2024		Became Public Law No: 118-187.
12/23/2024		Signed by President.
12/23/2024	House	Presented to President.
12/18/2024	Senate	Message on Senate action sent to the House.
12/17/2024	Senate	Passed Senate without amendment by Unanimous Consent. (consideration: CR S7093)
12/05/2024	Senate	Received in the Senate, read twice.
12/04/2024-4:07pm	House	Motion to reconsider laid on the table Agreed to without objection.
12/04/2024-4:07pm	House	On motion to suspend the rules and pass the bill, as amended Agreed to by voice vote. (text: CR H6340-6342)
12/04/2024-4:02pm	House	DEBATE - The House proceeded with forty minutes of debate on H.R. 9566.
12/04/2024-4:02pm	House	Considered under suspension of the rules. (consideration: CR H6340-6342)
12/04/2024-4:02pm	House	Mr. Langworthy moved to suspend the rules and pass the bill, as amended.
09/18/2024	House	Ordered to be Reported by the Yeas and Nays: 39 - 0. Action By: Committee on Oversight and Accountability
09/18/2024	House	Committee Consideration and Mark-up Session Held
09/12/2024	House	Referred to the House Committee on Oversight and Accountability.

MEMO: https://www.congress.gov/congressional-record/volume-170/issue-179/house-section/page/H6342
DEMO: dsacms.github.io/share-it-act-lp/ (scroll to summary)

gov-codejson 📜

A repository that acts as a hub for everything code.json related.

The 2016 Federal Source Code Policy (M-16-21) required agencies to publish inventories of custom-developed code to promote discoverability and reuse across government. In response, the Source Code Stewardship Task Force launched efforts to create comprehensive software inventories.

At CMS, this led to the development of code.json, a metadata standard harmonization that collects detailed project information to better identify, classify, and understand agency repositories.

REPO: https://github.com/DSACMS/gov-codejson

README   Code of conduct   More ▾   ✏️ ☰

gov-codejson

code.json: An agency-wide metadata standard for software projects

About the Project

This repository contains documentation on code.json, a metadata standard used to collect information on the agency's software projects in compliance with M-16-21 and the SHARE IT Act.

- metadata.md: Overview on code.json metadata standard
- schemas: code.json generic schema and agency-level schemas
- procedures.md: Procedures and tools on creating and updating metadata
- examples.md: Good examples of metadata in current agency code.json files
- faq.md: Frequently Asked Questions

Project Vision

To streamline federal agencies' compliance with open source requirements that ensures consistent, accurate, and automated collection of software project metadata enabling transparency, traceability, and efficient risk management across the government.

repo-scaffolder 🛠️

Adding a code.json file to repositories using **cookiecutter**

- Command-line tool that asks questions about repository to user and generates code.json file

- First attempts at automation of code.json fields

Limitations:

- Required dependencies such as python, cookiecutter

- Dev-friendly but not user friendly…

DEMO: https://github.com/DSACMS/repo-scaffolder/blob/main/tier0/%7B%7Bcookiecutter.project_slug%7D%7D/.github/cookiecutter.json

codejson-generator 📝

A static form site for project teams fill out information about their repository and creates a completed code.json

- Built using HTML/CSS/JS and form.io, an open source form builder
- Uses GitHub API to auto-populate 12 out of the 37 fields
- Offers various options to add code.json file to repository:
  - Preview functionality with copy option
  - Save code.json file locally
  - Add code.json file via pull-request
- User-friendly, hosted on GH pages

DEMO: https://dsacms.github.io/codejson-generator

CMS Code.json Metadata

A metadata standard for software repositories of CMS

Auto Generate Fields

Please enter your repositories GitHub URL in order to automatically pre-fill some of the fields in this form!

This currently only works on public repositories

GitHub Repository URL

[   ]

[Submit]

name *

[   ]

Name of the project or software

description *

[   ]

A short description of the project. It should be a single line containing a single sentence. Maximum 150 characters are allowed.

longDescription *

[   ]

Provide longer description of the software, between 150 and 10000 chars. It is meant to provide an overview of the capabilities of the software for a potential user.

status *

○ Ideation
○ Development
○ Alpha
○ Beta
○ Release Candidate
○ Production
○ Archival

Development status of the project

permissions *
licenses *

automated-codejson-generator ⚙️

Runs the codejson-generator as a GitHub action

- Sends PRs to projects that can be filled in in the browser
- Will create a missing code.json, or update an existing code.json metadata file
- Can be run periodically, on a per-repo basis as a .github/workflow

REPO: https://github.com/DSACMS/automated-codejson-generator
DEMO: https://github.com/DSACMS/repolinter-test-1/pull/5/files

index-generator / index-generator-website 📋

- Agency-level Scope (HHS)
- Any agency can input
  - their name
  - their metadata schema,
  - their GH orgs,
  - and optionally, a GH Token for rate limiting, and
  - it will generate a standards compliant index, that can be hosted on the agency's TLD as required by M-16-21.

REPO: https://github.com/DSACMS/index-generator-website
DEMO: https://dsacms.github.io/index-generator-website/
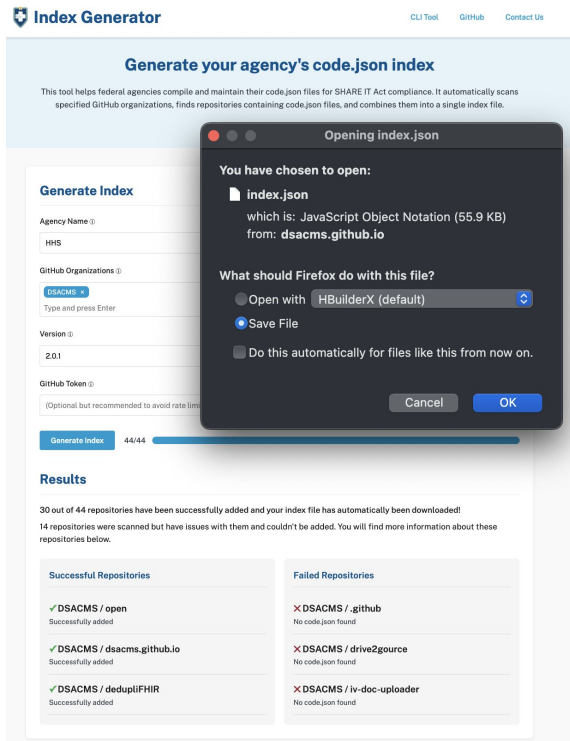
share-it-act-lp 🤝

- "Ties it all together"
- One-stop-shop for all the SHARE IT Act docs and tools in our Stack using "cards"
- Includes a new "quiz" that helps users understand where they are in their journey*

*: with possibly more quizzes to come in the future

DEMO: dsacms.github.io/share-it-act-lp/

code.gov 🇺🇸

M-16-21 required agencies to provide an inventory of their custom source code since August 8th, 2016. This was inconsistently followed by agencies, likely due to a lack of appropriated funding, accountability mechanisms, or automation.

The EO creating code.gov, had identical language that was written into The SHARE IT Act, clearly indicating a connection between the approaches.

In March of 2025, this website was taken down. Even before 2025, GSA faced challenges to maintaining the site, such as to staff turnover, and the resource costs of hosting on cloud.gov.

In May of 2025, the OSPO team began the rewrite to address these issues.

- Static Site that does not require funding
- Open Source Repo with community support to alleviate staffing pressure and distribute maintenance burden
- Automated integration with the SHARE IT repo and index level tooling that the OSPO built for CMS and HHS, to bring a holistic approach to solving this for the entire government.

REPO: https://github.com/DSACMS/code-gov
DEMO: https://dsacms.github.io/code-gov
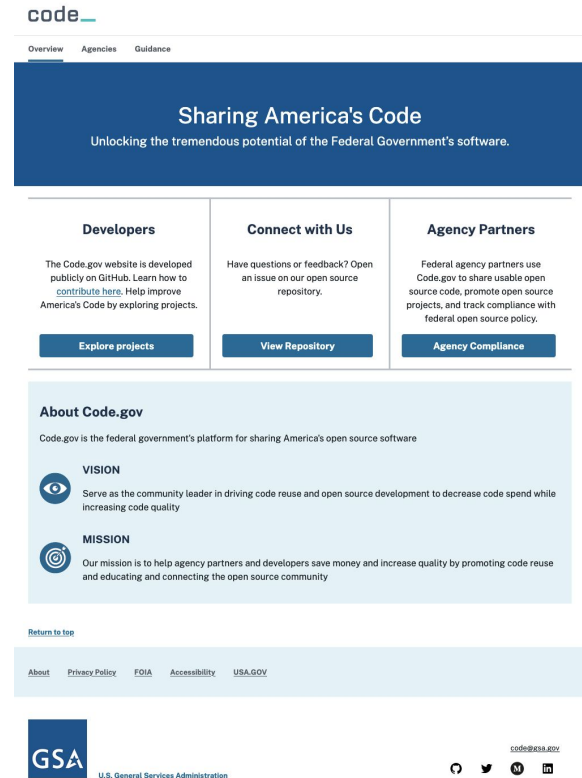
Code.json Deep Dive

Federal Gov Level (e.g. Code.gov)

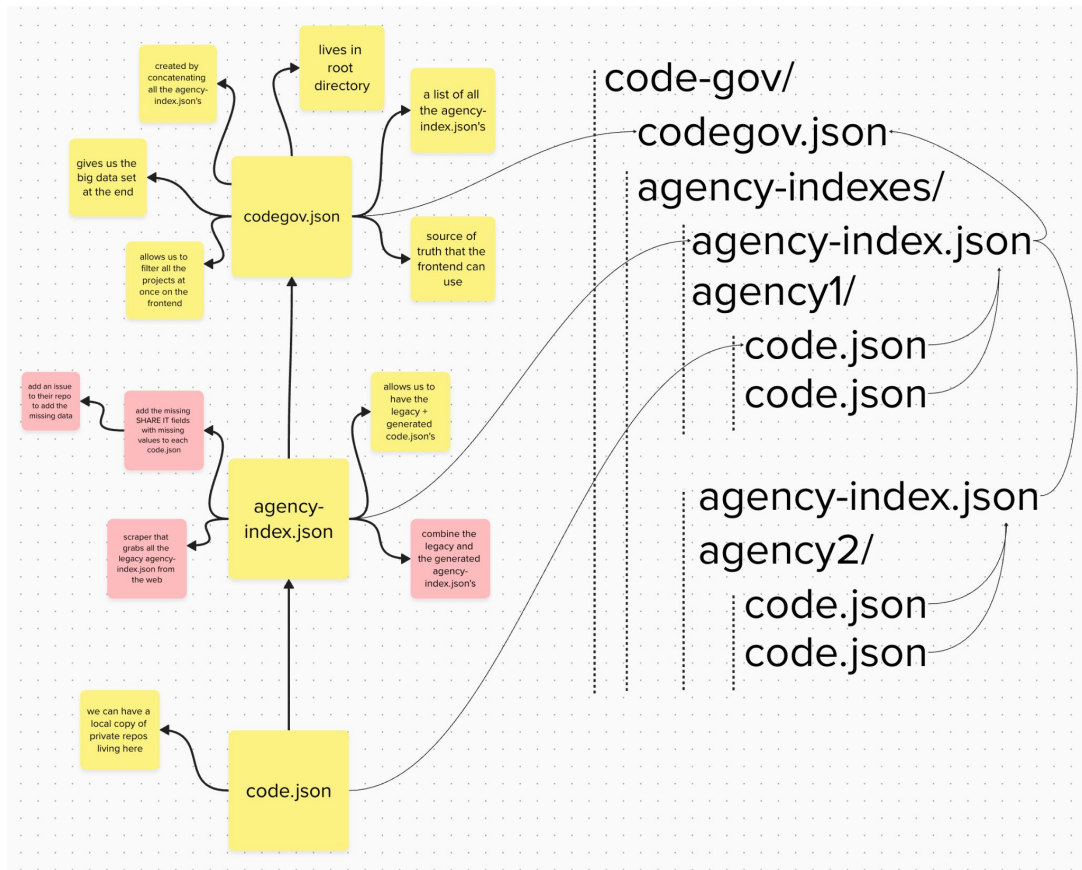- **codegov.json** acts as a source of truth for all repos at all agencies.

Agency Level (e.g. HHS)

- **agency-index.json** serves as a source of truth for an agency inventory.

Project Level (e.g. Bluebutton)

- **Code.json** serves as source of truth for a repository.

Plans to submit this as an open dataset on data.gov?

The Proposed Path Forward 🛤️

CMS to update our Acquisition Policies across the agency

- OSPO Briefing OAGM on 08/06

HHS to upload the 'new' SHARE IT Act Indexes

- Working with OCDO to locate the keeper of this file and support them

OFCIO to send a report to congress annually (**Due Dec 31st, 2025**)

- Our Code.gov website could just *be* this report, printed to PDF…

OFCIO to send a impact report to congress at the end of year 2 (**Due Dec 31st 2026**)

- Our Metrics website roadmap includes a 'burndown' of code.json tickets open/closed, and
- the 'reuseFrequency' metadata in the new code.json is a field we can query to generate metrics across the entire federal ecosystem.

Thank You DSAC Virtual Retreat!

Digital Service at CMS
Summer 2025

Questions/Comments/Feedback?

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