Carlo Costino, Bret Mogilefsky, Abbey Kos   February 2019

In 2010, OMB announced the Federal Cloud Computing Strategy ("Cloud First").

First FITARA scorecard (2015)

Agency	Data Center Consolidation[1]	IT Portfolio Review Savings	Incremental Development[2]	Risk Assessment Transparency	Overall Grade
USDA	F	F	D	B	D
DOC	A	B	C	A	B
DOD	F	F	F	C	D
Ed	F	F	F	D	F
DOE	F	F	F	D	F
HHS	F	F	B	C	D
DHS	A	C	F	B	C
HUD	—	F	F	A	D
DOI	F	B	F	A	C
DOJ	A	F	F	D	D
DOL	F	F	D	C	D
State	C	F	F	F	D
DOT	F	F	F	C	D
Treasury	F	B	D	D	D
VA	F	F	A	C	C
EPA	F	F	A	A	C
GSA	D	C	A	B	B
NASA	F	D	—	F	F
NRC	F	F	A	A	C
NSF	A	F	—	F	D
OPM	F	F	F	B	D
SBA	—	F	F	B	D
SSA	F	A	F	D	D
USAID	—	C	—	F	D

Even after five years, progress was slow.

No agency earned an "A" on the first FITARA scorecard. Nearly 70% earned a "D" or "F."

The barrier to access was too high.

Even the best case scenario time to deployment was **6-9 months**

Tech requirements

Stack: Web server, app server, database, cache, index

Environments: (Local), dev, test, stage, production

User management: Admin, devs, auditors

Operations: Patch, logs, CDN, scanning, availability

Implementation requirements

Steps: Procure, provision, develop, document, audit, deploy, operate

Government **security and compliance** requirements not adequately addressed by industry

Agencies often not **staffed appropriately** to own and operate cloud infrastructure

18F knew how to reduce the technical burden.

18F knew a government-led product could reduce the compliance burden.

So we built cloud.gov.

cloud.gov is a **Platform as a Service** (PaaS).

It is based on **open source** Cloud Foundry and built on AWS GovCloud.
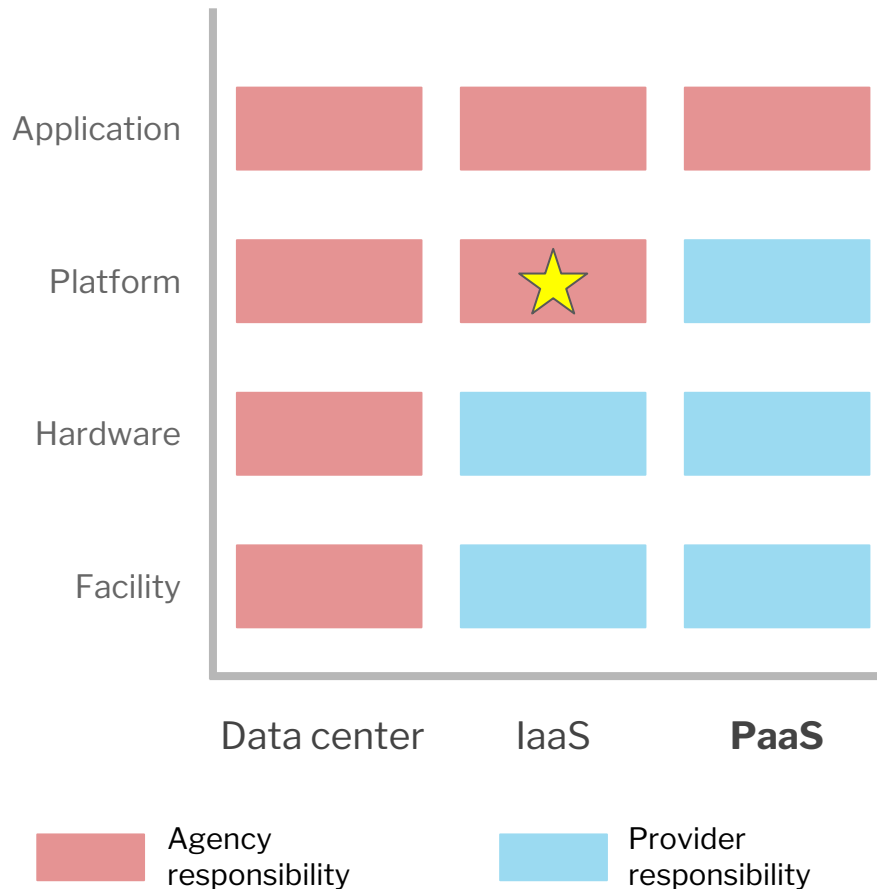
It has baked-in **federal security compliance.**

Platform as a Service

cloud.gov is a **pre-built environment** ready for deploying an application.

It lets agencies reduce what they need to manage and focus on **mission needs** instead.

Here is my source code
Run it on the cloud for me
I do not care how

18 agencies, 31 systems

Federal Election Commission

General Services Administration

Department of Education

Department of Justice, FBI

Federal Deposit Insurance Corporation

Department of Health and Human Services

National Institutes of Health

Environmental Protection Agency

Department of the Interior

Bureau of Alcohol, Tobacco, Firearms, and Explosives

Department of Homeland Security

Department of State

National Oceanic and Atmospheric Administration

Office of Personnel Management

US Agency for International Development

Department of Agriculture, Forest Service

US Air Force

Internal Revenue Service

Demo

Federal Election Commission (fec.gov)

FEC spent $1.4 million annually on their data center

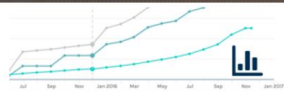With cloud.gov + AWS, initial estimates show **$1.2 million in savings annually**

Federal Election Commission
UNITED STATES —of— AMERICA

Menu ☰

Protecting the integrity of the federal campaign finance process

More about the FEC

Campaign finance data

Showing how money is raised and spent in federal elections.

Learn more ▼

Help for candidates and committees

Providing guidance for individuals and groups that are active in federal elections.

Learn more ▼

Legal resources

Administering and enforcing federal campaign finance law.

Learn more ▼

By the numbers

Production apps

375

Managed services

816

Paying organizations

64

Team size

8

(down from a peak of 24)

Our goal in the coming months: articulate cloud.gov's vision for 2020 and beyond.

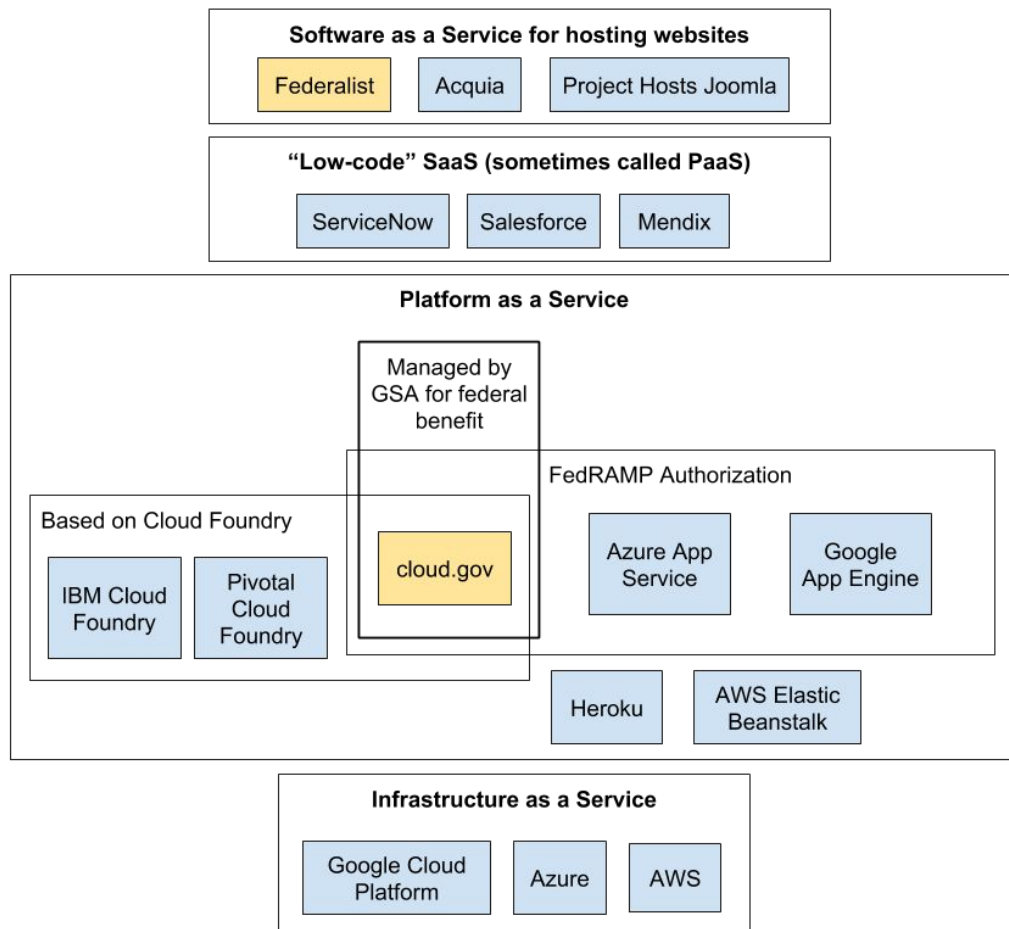We'd like to work with you to make that happen.

We'd also like to lead the way in building GSA IT/TTS relationships.

Thank you!

cloud.gov

Appendix

Cloud.gov's placement in the cloud ecosystem

Software as a Service for hosting websites
Federalist | Acquia | Project Hosts Joomla

"Low-code" SaaS (sometimes called PaaS)
ServiceNow | Salesforce | Mendix

Platform as a Service

Managed by GSA for federal benefit

FedRAMP Authorization

Based on Cloud Foundry
IBM Cloud Foundry | Pivotal Cloud Foundry

cloud.gov

Azure App Service | Google App Engine

Heroku | AWS Elastic Beanstalk

Infrastructure as a Service
Google Cloud Platform | Azure | AWS

Links to explore

- Case studies
- Quickstart
- FedRAMP
- ATO process
- Supported applications
- Pricing
- Data flow diagrams