RED HAT
OPEN INNOVATION LABS

THE CATALYST FOR GOVERNMENT I.T. TRANSFORMATION
CATALYZE INNOVATION

Jump-start modern application development. Learn to build software the Red Hat® way.

Page 1
THE RACE TO KEEP UP WITH ACCELERATING CHANGE

Page 2
DEVOPS

Page 3
OPEN INNOVATION LABS: A SPACE TO CATALYZE CHANGE

Page 4
TRADITIONAL I.T. VS. OPEN INNOVATION

Page 5
PICTURE YOURSELF AS A RESIDENT

Page 7
RED HAT OPEN INNOVATION LABS

Page 8
WHAT WE BELIEVE

Page 9
LESSONS WE’VE LEARNED

Page 11
SCHEDULE A SESSION
THE RACE TO KEEP UP WITH ACCELERATING CHANGE

How can government IT move faster?

Today’s citizens can make a reservation at a nearby restaurant, order a driver, or join an online class with a few clicks in a mobile app or browser. They expect interactions with government to be just as convenient. Picture self-service web portals for checking tax refund status. Mobile apps for reporting emergencies or infrastructure in need of repair. New ways of crowd sourcing data to increase situational awareness during disasters.

Federal agencies urgently need to modernize aging legacy applications:

78% of IT budgets go toward operations and maintenance (O&M)\(^1\)

O&M spending increased from 2010-2017, leaving less budget for development, modernization, and enhancement (DME)\(^2\)

Lack of support for older systems increase security risks

Old IT makes it harder to compete with the private sector for top talent

But developing government applications can take years and cost millions.

Security, compliance, and privacy requirements stall progress. IT projects can become irrelevant before they’re even complete.

Everything development and operations teams need to know to work together is RIGHT HERE IN THIS 400-PAGE DOCUMENT.

The infrastructure for your project WON’T BE READY FOR A COUPLE WEEKS.

That feature was a project requirement when we started, but NOBODY NEEDS IT ANYMORE.

How can I quickly get a FEDRAMP AUTHORIZATION TO OPERATE (ATO)?
Digital leaders in government are innovating faster and improving quality with DevOps.

The approach is to make large-scale changes iteratively, instead of all at once—adjusting direction as you go. DevOps and open source have much in common. Both depend on cultural transformation as much as code. The principles:

- **Everyone participates**
  Engaged communities are better at adopting change.

- **Open**
  Open standards preserve business agility.

- **Transparent**
  Transparency promotes honesty and authenticity.

- **Shared**
  Shared problems are solved faster.

As the leading enterprise open source company, Red Hat has been living these principles since 1993. Now you can experience what we’ve learned during a residency at Red Hat Open Innovation Labs.

“At the end of the day, when we talk about technology change ... it’s really about people and organizational cultures, first and foremost. Then it’s about how those people get stuff done together.”

Dr. David Bray
Chief venture officer, National Geospatial Intelligence Agency
A SPACE TO CATALYZE CHANGE IN GOVERNMENT I.T.

Innovation flourishes in an environment where:
» The watchwords are “try,” “learn,” and “modify.”
» You can make a small investment and either win quick—or fail fast and pivot.
» It’s okay to not know everything in advance.

Red Hat Open Innovation Labs is that kind of space. We’ve distilled the best of open source tools, methods, and culture into an environment designed for speed and innovation. Join us for a collaborative residency designed to help you deliver innovative software faster.

Who
3–6 of your engineers and product owners. Work alongside Red Hat mentors. Learn by doing. Then bring your knowledge back to your team.

Where
Join us at Open Innovation Labs in Boston, London, or Singapore. We can also bring Labs to your offices or an offsite facility.

What
The infrastructure and software tools you need for rapid experimentation and prototyping—either modernizing existing applications or developing new, cloud-native applications. Expect 1–3 months to build a prototype or migrate an existing application to a modern, cloud-based platform.

Why
Tools alone don’t transform application development; it’s what you do with the tools that matters. Labs is a space where it’s safe to test a hypothesis. Quickly prove it and move ahead. Or swiftly disprove it and try a new approach.

LOW CYCLE TIME
We’ve automated just about everything to make it easy to experiment and quickly get feedback.

HIGH CODE QUALITY
Testing is built into the pipeline.

REPEATABILITY
You’ll learn to use containers and image management throughout the pipeline. Applications work the same way in production as they do in development or test.
"By creating a shared space for testing and developing new open source solutions, I hope that [the CA Innovation Lab] will spur a culture of innovation within state government and lead the nation in using technology to bring the government closer to the people."

Gavin Newsom
Lieutenant governor of California
PICTURE YOURSELF AS A RESIDENT
Apply DevOps to a real business need

In Red Hat Open Innovation Labs, you can work on any type of project: legacy or greenfield. Our platform bridges both environments.

» Develop cloud-native applications
  • Develop on Platform-as-a-Service and Infrastructure-as-a-Service
  • Transform how you design
  • Adopt lean and agile principles
  • Learn DevOps practices
  • Learn to use microservices

» Modernize legacy applications
  • Extend, optimize, scale, and orchestrate
  • Connect to modern frameworks to make legacy applications easier to manage, test, and automate

Step 1
Decide what type of journey you’ll take

Disruption.
Co-create an innovative service or prototype.

Digital transformation.
Initiate meaningful change in your organization.

Road trip.
Experience modern application development and DevOps with an expert coach by your side.

Step 2
Craft the plan for your journey

“I want [feature] so that I can [reason].”

» Decide which features you’ll develop in Labs to create the minimum viable product (MVP) that satisfies the need.

» Learn design techniques like event storming, impact mapping, and domain-driven design.

Step 3
Begin development right away

Build your environment in minutes, using the Ansible automation engine. Set up in a public cloud (Amazon Web Services, Microsoft Azure, Google Cloud) or a private cloud (Red Hat Virtualization, OpenStack®, bare metal). Select the right application framework, tools, and platforms for your agency with a few clicks. Then watch your ideas come to life.

In Red Hat Open Innovation Labs, you can work on any type of project: legacy or greenfield. Our platform bridges both environments.
Step 4
Regularly evaluate progress

We’ll work in a timeboxed fashion. Work for a period of time to complete a goal, then stop and evaluate. Continue or shift direction.

Get fast feedback. You’ll demo at every sprint interval, presenting what you’ve built to your stakeholder community.

Step 5
Demo your product

At the close of the residency, share the MVP with your larger team—and celebrate.

Step 6
Become the catalyst for innovation

Bring what you’ve learned in Labs back to your organization:

» People
  • Experience with agile, DevOps, and modern application development
  • Access to Red Hat Learning Subscription and Red Hat Certifications

» Technology
  • Working prototype application
  • Infrastructure as code (IaC)
  • Feature backlog

» Methodology
  • Community-powered DevOps
  • Container-based delivery pipeline
RED HAT OPEN INNOVATION LABS


» Choice
Modernize legacy applications or develop new cloud-native apps. Our stack provides the tools for both types of development.

» Culture
Immerse yourself in open source culture. The same principles that helped you decide what to develop also apply to how to develop.

» Learning
Enjoy access to the full Red Hat stack and Red Hat Learning Subscription for 12 months.

» Innovate anywhere
Come to our Labs, or let us come to you—your offices or an offsite facility.

» Mentoring
Work with leading open source experts.

» Full stack of open source software
The infrastructure you’ll use during your residency is open source from top to bottom—not just at the core. Everything you create during your residency uses open standards and application programming interfaces (APIs), giving you flexibility to avoid vendor lock-in.

An immersive residency with Open Innovation Labs gives you everything you need for modern application development.
"[Open Innovation Labs] really helped us jumpstart things and have absolutely exceeded our expectations ... take advantage of it if you have the opportunity."

John Hodgson, Senior director, Optum

"The new techniques and tools ... and Red Hat experts allow us to move at a pace I never thought would be possible. I couldn’t speak more highly of the whole experience."

K.L., Manager, Government Healthcare company
LESSONS WE’VE LEARNED
From customers around the world on their journey to DevOps

» Start small
» Pick the right project: straightforward and not mission-critical
» Experiment and iterate
» Fail fast

» Win quick
» Market the success internally to bring about a change in culture
» Build momentum with more investments

THE RED HAT CREDO

INDIVIDUAL ACTION
Innovation begins with individual action.

CULTURE
Open source is about more than tools; it’s culture—one that enables innovation.

AUTOMATION
Automation leads to quick results.

TOGETHER
Open source is about individuals coming together.

MERITOCRACY
Open source is driven by meritocracy: Let the best ideas win.

MENTORING
Mentoring is important. When people exit our Labs, they’re good stewards of DevOps, prepared to catalyze innovation in your organization.
TAKE THE FIRST STEP
Join us and map your journey in a day-long, complimentary Red Hat Consulting discovery session:

» COLLABORATE
Your stakeholders and Red Hat consultants

» CAPTURE
Your vision, challenges, opportunities, and goals

» ROADMAP
Learn how others have done it—and how you can too
SCHEDULE A COMPLIMENTARY DISCOVERY SESSION AT YOUR LOCATION.

red.ht/labs