



Navigate AI with Red Hat:

Expertise, training, and support
for every stage of your AI journey

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Introduction



As the technology powering today's organizations continues to change at a rapid rate, artificial intelligence (AI) is becoming a standard IT workload.

Many organizations have begun to integrate AI into both internal operations and end-user experiences, including embedding AI into their applications, to:



Streamline internal processes.



Improve customer and employee experiences.



Gain competitive advantage with differentiated digital services.



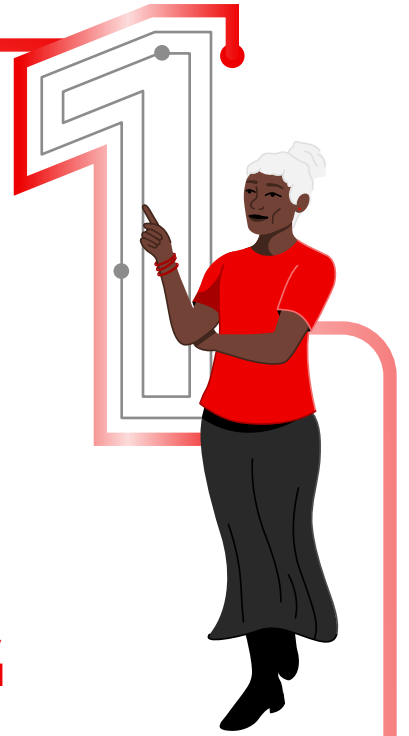
Increase revenue and reduce operational costs.

But achieving these benefits can be difficult, and organizations may face challenges that prevent their AI projects from making it into production.

Red Hat® Services offers customers a suite of service offerings to help them overcome the challenges of AI—no matter where they are in their AI journey—to launch their AI projects in less time, build optimized MLOps environments, learn best practices, and ultimately, achieve their business and IT objectives with AI.

In this e-book, we will explore Red Hat's AI strategy, how the complete Red Hat AI portfolio can help organizations realize the full potential of AI, the value of engaging Red Hat Services, and how this all comes together to help organizations build the roadmap and foundation of AI technology and skills needed for long-term AI success.

Red Hat's unique AI strategy



Red Hat AI is a solution portfolio built on the foundation of the power of open source technology, the flexibility of open hybrid cloud environments, a vast partner ecosystem of complementary AI solutions, and Red Hat's own extensive experience helping customers work with AI to deliver trust, choice, and consistency.



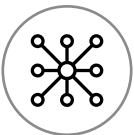
Trust. Red Hat builds AI solutions on trusted, reliable, and stable platforms designed to help organizations build, operate, and run AI-enabled applications alongside critical workloads with a focus on security—at scale, and in any environment.

This AI strategy underpins Red Hat's goal of becoming a trusted partner to its customers as they traverse the AI adoption journey, and beyond, to help them achieve their business and IT goals with the power of Red Hat's portfolio of AI solutions.



Choice. Red Hat builds AI solutions that prioritize choice, flexibility, and interoperability, to help organizations create comprehensive solutions for diverse business needs that can evolve in response to future requirements. This flexibility includes support for community-built tooling and models, open source contributions, and Red Hat's extensive partner ecosystem portfolio.

Myth:
AI will take away jobs.



Consistency. Red Hat builds AI solutions that provide consistency across different toolchains and various operating environments to help support an organization's AI adoption journey. This is delivered through a consistent user experience and access to shared tools and frameworks for supporting AI deployments from pilots to production, across any environment.

Truth:
AI is only a tool. Like other IT tools, it can be used to increase the efficiency of existing processes to achieve higher-quality results, allowing an organization's team to focus their time and energy on higher-value tasks. AI works alongside teams to streamline their responsibilities or make them more productive—not to replace them.

Red Hat's complete AI portfolio

The complete Red Hat AI portfolio encompasses a large selection of solutions and service offerings designed to help organizations navigate the entire AI journey.

This includes AI models delivered on [Red Hat Enterprise Linux® AI](#) and Red Hat's AI-powered application platform, [Red Hat OpenShift® AI](#), AI-enabled tools such as [Lightspeed](#), and service offerings focused on building the skills for creating successful AI-enabled applications, all of which we will explore further.

Other tools from Red Hat that enhance the value of its AI portfolio include:

- **The Red Hat build of Keycloak**, a cloud-native identity access management solution based on the open source Keycloak project.
- **Red Hat's build of Apache Camel 4**, a development toolkit for streamlined application integration that simplifies and standardizes the practice of connecting diverse systems.
- **Red Hat AMQ**, a messaging platform that delivers information flexibly and reliably to allow real-time integration and connection with the Internet of Things (IoT).
- **Red Hat AMQ Streams**, a scalable, distributed, and high-performance data streaming platform based on the Apache Kafka project that allows microservices and other application components to exchange data with extremely high throughput.



Myth:

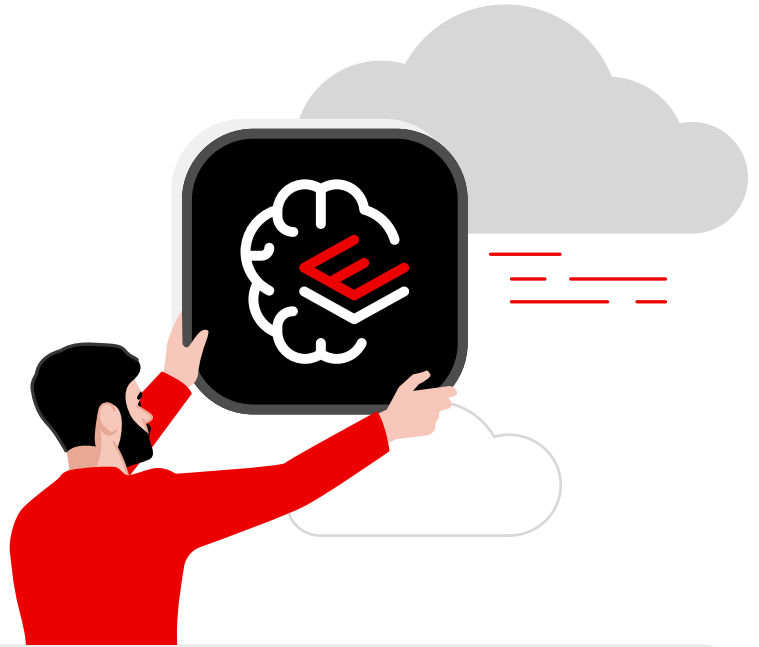
AI is too complex.

Truth:

Like most emerging technologies, AI can seem quite complicated, especially for those who have never used it. But with the right approach—especially when determining how to get started—organizations can implement AI in a manner and at a pace that makes sense for their stage of readiness before evolving and moving forward as a unified team to incorporate higher complexity AI tasks as their abilities grow.

Red Hat Enterprise Linux AI

This AI-optimized version of Red Hat Enterprise Linux allows organizations to train, test, and run Granite family large language models (LLMs)— which are supported and backed by Red Hat’s Open Source Assurance legal protections—for enterprise applications. It also provides access to partner ecosystem models, and support for a customer’s preferred models, including models from open source communities (such as Llama and Mistral), watsonx.ai, Hugging Face, and more.



Designed to address the complete lifecycle of an AI model by providing organizations with base models, alignment tuning, tested and proven methodologies and tools, and platform optimization and acceleration capabilities, this solution includes:



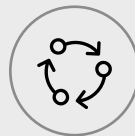
Granite family models. Open source-licensed LLMs, distributed under the Apache-2.0 license, with complete transparency on training datasets.



InstructLab model alignment tools. A scalable, cost-effective solution for enhancing LLM capabilities and making AI model development open and accessible to all users.



Optimized bootable model runtime instances. Granite models and InstructLab tooling packaged as a bootable Red Hat Enterprise Linux image, including Pytorch/runtime libraries and hardware optimization through NVIDIA, Intel, and AMD.



Enterprise support, lifecycle, and indemnification. 24x7 production support, extended model lifecycle, and model IP indemnification by Red Hat.

Red Hat OpenShift AI

This integrated MLOps platform helps organizations create and deliver both generative AI (gen AI) and predictive models at scale across hybrid or multicloud environments.

With the capabilities for model development, model serving and monitoring, lifecycle management, and resource

optimization and management, Red Hat OpenShift AI delivers a consistent, streamlined, and automated experience to help organizations deliver AI-enabled applications into production with the same tools and processes they use on Red Hat OpenShift.

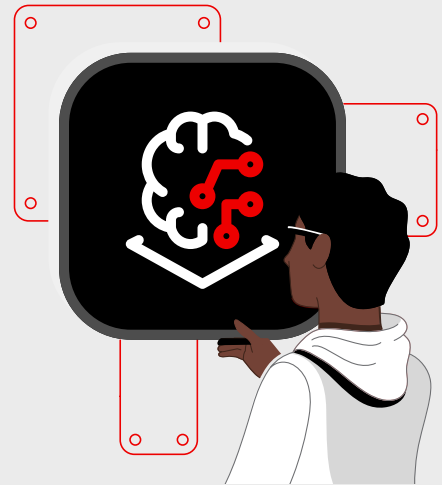
All of this comes together to provide customers with:



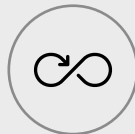
Support for multiple artificial intelligence/machine learning (AI/ML) libraries, frameworks, and runtimes.



Access to AI/ML libraries and frameworks, including TensorFlow and PyTorch, using Red Hat's default workbench images or an organization's custom workbench images.



Flexibility to deploy models across any cloud, using either a fully managed or self-managed OpenShift footprint, and centrally monitor their performance.



The ability to expand DevOps practices to MLOps, with repeatable data science pipelines for model training and validation, and integration with continuous integration/continuous delivery (CI/CD) pipelines for delivery of models across an entire enterprise, to manage the entire AI lifecycle.



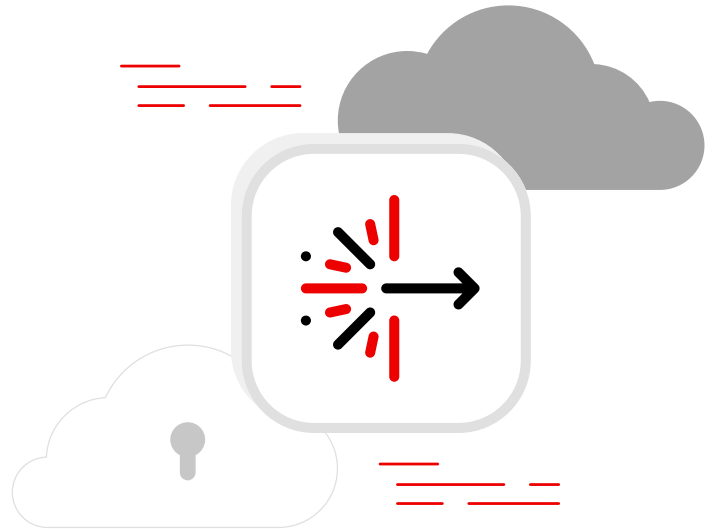
The scalability needed to meet the workload demands of foundation models and traditional ML.

Additionally, a Red Hat OpenShift AI subscription includes access to Red Hat Enterprise Linux AI, so teams can use the same models and alignment tools in their OpenShift AI architecture, as well as benefit from additional enterprise MLOps capabilities.

Lightspeed portfolio of gen AI-powered tools

To enhance user experience, productivity, and adoption of its AI platforms, Red Hat has also developed a set of gen AI-powered tools that help reduce the complexity of many of the most difficult AI-related computing tasks.

By providing generated content in the form of code, recommendations, or troubleshooting, the Lightspeed portfolio helps make AI technology and Red Hat AI platforms more accessible and efficient, no matter an organization's skill level.



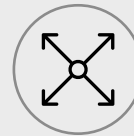
The Lightspeed portfolio of tools includes:



Red Hat Ansible® Lightspeed, which integrates with IBM watsonx Code Assistant to bring the power of gen AI to Ansible Playbook creation by providing recommended automation code.



Red Hat OpenShift Lightspeed, a gen AI-based virtual assistant integrated into the Red Hat OpenShift web console to answer questions related to the platform.



Red Hat Enterprise Linux Lightspeed, which helps simplify the building, deploying, and managing of Linux instances.

All of this is further supported by Red Hat's diverse ecosystem of partners, which provides a range of solutions and tools designed to further help customers holistically address complex AI challenges, as well as a portfolio of Red Hat Services offerings that provide organizations with the expertise, skills building, and technical assistance they need to successfully adopt, integrate, and build value with AI.



The value of engaging Red Hat Services

Red Hat Services portfolio is designed to help customers maximize the value of their Red Hat technology investments at every stage, from solution implementation to enablement and beyond.

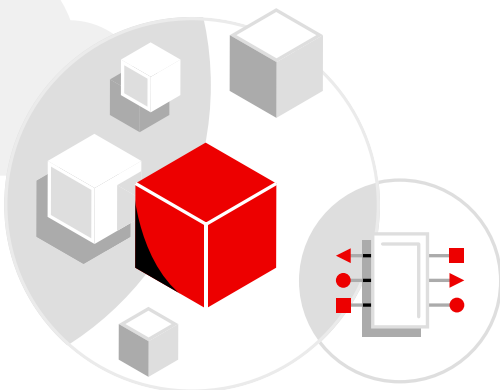
Red Hat Services draws on deep product expertise, including extensive experience building and integrating AI platforms, to provide organizations with the consulting, skills training, and ongoing technical support they need to align their teams, streamline their processes, and successfully adopt AI.

All of this is delivered through 3 key categories: [Red Hat Consulting](#), [Red Hat Training and Certification](#), and [Red Hat Technical Account Management](#).



Myth:
AI is too expensive.

Truth:
Like many other IT technologies, especially those that need to live in cloud environments or connect with other components in cloud environments, the operational costs of AI can add up if not properly managed. With the right expertise, those costs can be optimized to stay within an organization's budget and at a level that allows them to realize a significant return on investment (ROI).



AI Consulting

Red Hat Consulting provides the guidance organizations need to determine, plan, and implement effective next steps in their AI journey, while aligning their business and IT teams on a unified path to their desired business outcomes. Red Hat's extensive expertise is delivered through a mentor-based approach to help customers through the complexities of building and deploying production-ready AI solutions efficiently and with a focus on security throughout.



What customers say about Red Hat Consulting

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"Red Hat Consulting ventures beyond limited, high-level solutions. Rather than only addressing specific tasks like initial construction or introductory support...their approach aims for overall optimization right through to implementation. This level of consulting is rare."¹

Yasutaka Nakata

Manager, IT Infrastructure/Business Online Infrastructure System, Information Technology Division, Square Enix Co., Ltd.

66

"The project was complex, and any mistakes would have been costly. If we were going to invest in a new approach, we needed to ensure our teams were given the right knowledge and skills to support it. Red Hat Consulting was a great partner in our learning."²

Pierre-François Liozon

Unix Team Head, Crédit Agricole Group Infrastructure Platform (CA-GIP)

¹ Red Hat case study. "[Square Enix simplifies management of online gaming infrastructure](#)," 17 May 2023.

² Red Hat case study. "[CA-GIP scales with Red Hat Ansible Automation Platform](#)," 10 May 2022.

The business value of Red Hat Training and Certification

Red Hat Training and Certification

With a vast range of courses designed to help upskill teams and build the product expertise they need to implement and operate Red Hat AI solutions, most notably including Red Hat OpenShift AI, Red Hat Training and Certification offers role-based, hands-on courses and exams that help organizations develop the skills they need for long-term AI success.

Organizations that engaged Red Hat Training achieved:³

25-50%

more efficiency in completing day-to-day IT tasks.

77%

more effective new employees.

15%

more effective server utilization.

20%

reduction in support tickets generated.

32%

reduction in time to remediate support tickets.

What customers say about Red Hat Training and Certification



“Since we have made Red Hat Training part of our IT career path, we have seen a much better customer experience because of the improved quality and predictability of our systems. This has specifically helped us raise our satisfaction rates and reduce our customer churn.”³



“We have seen our support numbers go down. We have fewer issues because our systems run better, and when we do have tickets, they are solved faster because our people are better educated and take a more creative approach to finding solutions.”³

³ McAfee, Nathan. “Analyzing the Economic Impact of Red Hat Training.” Enterprise Strategy Group, Jan. 2024.

The business value of Red Hat Technical Account Management

Red Hat Technical Account Management

Dedicated Red Hat Technical Account Managers (TAMs) provide the ongoing support organizations often look for when adopting a new technology, to help them maximize that investment. As an organization develops, trains, and deploys AI, a Red Hat TAM monitors their progress, resolves any issues that may arise, and serves as their single point contact to advise on all things AI, including security and compliance guidance, proactive patching strategies, and more.

Organizations that engaged Red Hat Technical Account Management achieved:⁴

379%

3-year ROI.

40%

time savings for developers.

67%

reduction in system outage time.

US\$3.3M

in added value from improved developer and IT productivity.

**US
\$433,000**

in savings from lower technology fees.

**US
\$167,000**

in added value from improved security and compliance.

What customers say about Red Hat Technical Account Management

"I would say that our TAM helps people upgrade their skills. People that are working closely with a TAM learn a lot."⁴

Application architect, financial services

"The most crucial quality of the TAM from our perspective is the ability to connect our engineering and get information back and forth easily because they know the people on both sides."⁴

Product owner, telecommunications

"The TAMs really help us to manage the lifecycle of the product so that we know when things are about to go off of support, and we can get our customers, our development teams and whoever to migrate their stuff off of the old versions onto the newer versions."⁴

Senior manager and infrastructure systems engineer, healthcare

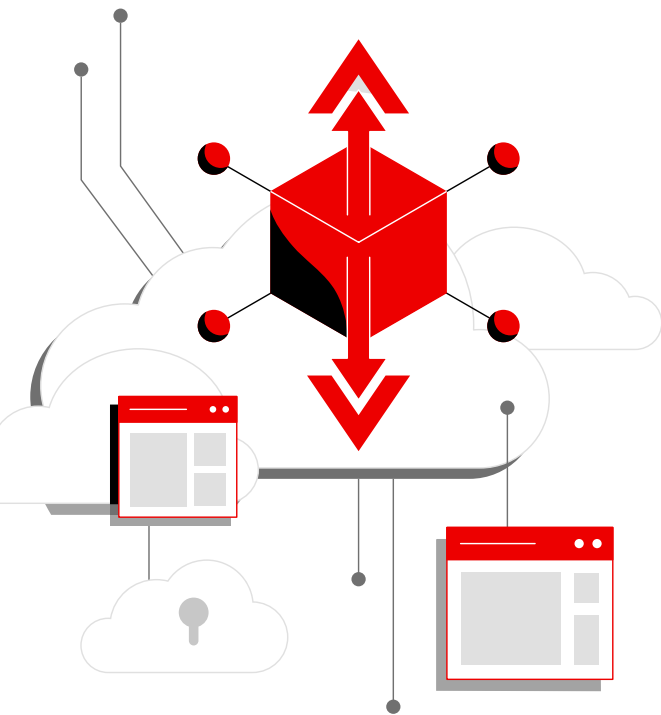
To further uncover how Red Hat Services directly helps organizations adopt, integrate, and build value with AI, let's take a closer look at these offerings and how their specific components apply to each stage of the AI journey.

⁴ Forrester Consulting, sponsored by Red Hat. "The Total Economic Impact™ Of Red Hat Technical Account Managers," March 2023.

Plan your AI roadmap

Any well-planned technology implementation should start with an organization identifying its goals and determining the best initial steps to take towards realizing those goals.

But with AI technology still in its early days, many organizations do not have a clear idea of what it is capable of, how it does what it does, how they can harness it to achieve their objectives, or even how to get started, leaving them unable to formulate realistic goals and a roadmap to achieving them.



Build entry-level AI skills with Podman

Organizations that have limited AI skills may want to start building that skill set through AI experimentation in a risk-free, no-cost environment. Start the entry-level AI journey in just a few minutes with these 5 simple steps:

- 1 [Download Podman AI Lab](#), a no-cost Red Hat extension that simplifies getting started and developing with AI in a local environment.
- 2 Deploy it locally onto a desktop or laptop.
- 3 Find a simple model to get up and running.
- 4 Experiment with that model to better understand the capabilities and use cases of AI.
- 5 Launch demonstration applications from Recipes Catalog to see how they integrate with your models.

Organizations that engage Red Hat Services have the opportunity to work side-by-side with Red Hat AI experts who can answer those questions for them, in a collaborative effort to build an AI roadmap that fits the organization's needs and business objectives.

The following 3 services are used during the initial engagements to help Red Hat Consulting experts gain a deep understanding of the organization's needs and challenges:



Free skills assessment. This self-guided tool gauges an organization's proficiency with Red Hat OpenShift development tools and processes, to help Red Hat consultants determine which Red Hat Training courses will help the organization reach its AI goals.

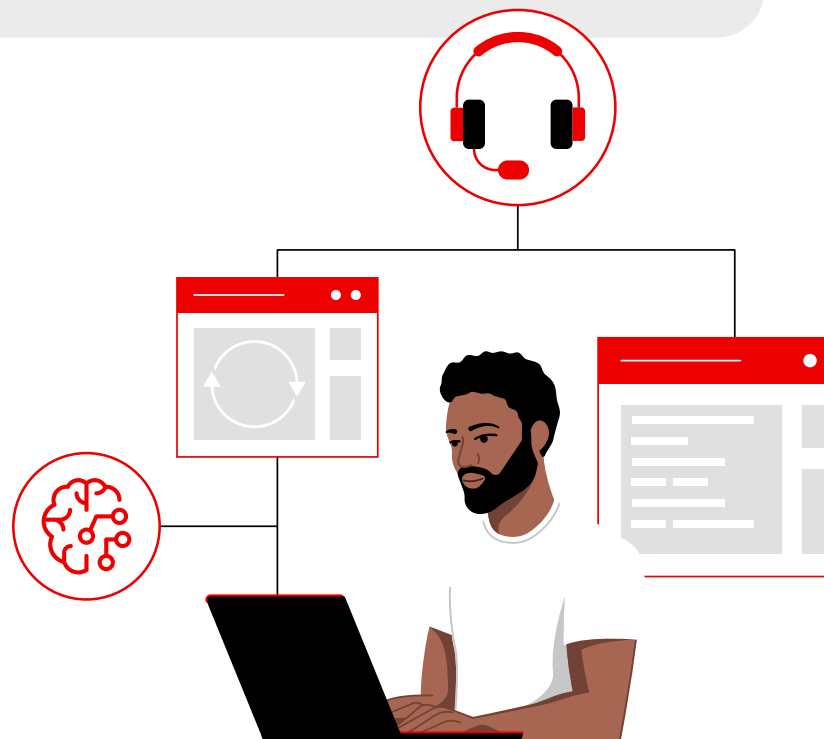


Navigate. Using Red Hat Consulting Offering: Navigate, experienced Red Hat architects conduct a series of tailored workshops aimed at understanding the organization's challenges and providing an architectural foundation and roadmap to adopt Red Hat OpenShift AI.



OpenShift Health Check. This service helps Red Hat consultants assess an organization's existing Red Hat OpenShift ecosystem and provide recommended next steps.

Red Hat consultants use their findings from these services to plot an organization's strategic path towards successful AI adoption, including steps to lower operational costs, optimize resource use, enhance scalability, and accelerate AI innovation. Their findings also help inform the creation of strategies to align an organization's internal teams on a path to unified AI goals, and identify the right tools and configurations to create an effective AI/ML platform tailored to an organization's needs.



Build your AI foundation

Building upon the organization's new AI roadmap, the next phase sees Red Hat Services experts establish a solid foundation for future AI success through 2 main components.

First, Red Hat consultants design, install, configure, and integrate the architecture needed for an optimized Red Hat OpenShift AI platform, including the automation of data pipelines, model experimentation and training environments, and MLOps processes.

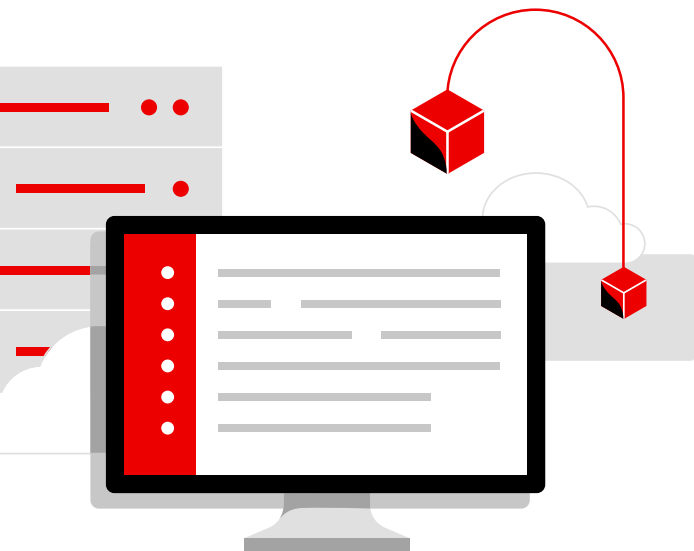
The second component is focused on building and validating the organization's internal AI skills through Red Hat Training and Certification programs, including the skills needed to create and deploy ML models, automate data pipelines, and more.



Start learning Red Hat OpenShift AI

The recommended learning path for Red Hat OpenShift AI is made up of several Red Hat Training modules, delivered as self-paced courses, including:

- 1 Introduction to Red Hat OpenShift AI
- 2 Red Hat OpenShift AI Administration
- 3 Creating Machine Learning Models with Red Hat OpenShift AI
- 4 Deploying Machine Learning Models with Red Hat OpenShift AI
- 5 Automation using Data Science Pipelines
- 6 Developing and Deploying AI/ML Applications on Red Hat OpenShift AI



Among Red Hat's extensive range of AI service offerings, there are a number that are primarily used to help build an organization's AI foundation, including but not limited to:



Red Hat OpenShift AI Skills Path. Red Hat experts provide the organization with their recommended Red Hat OpenShift AI training courses and certifications, which can be completed as part of the subscription offering following this, or separately at an organization's own pace.



Red Hat Learning Subscription. Organizations are given unlimited access to Red Hat Training courses to help them build foundational AI skills.



AI Platform Foundation. Through a mentor-based approach, Red Hat consultants install and configure Red Hat OpenShift AI in a production-ready OpenShift environment within the organization's existing infrastructure.



MLOps Foundation. Through a mentor-based approach, Red Hat consultants provide pipelines and patterns to help customers transform data experiments into production-ready AI.



MLOps Add-on: Remote Environments. Through a mentor-based approach, Red Hat consultants help customers with remote environments develop domain-specific use cases that meet their needs.



AI Incubator. This Red Hat OpenShift AI residency provides immersive, premium service to help organizations develop, launch, and scale their own production-ready AI solution.

Evolve your AI capabilities



After charting an organization’s desired path to AI success, and establishing the foundation on which to build that roadmap, the Red Hat Services for AI journey reaches its final and perhaps most impactful stage.

This final stage is focused on helping customers expand and evolve their AI capabilities to achieve long-term success with higher value use cases and more innovative AI projects. This is first achieved by providing organizations with the training and enablement required to automate, operationalize, and scale their Red Hat AI platform to include advanced use cases, data productization, LLM use, and more.

Reaching the end of this crucial stage concludes the Red Hat Services for AI journey, and will leave an organization with:

journey and expand their AI footprint. But customers looking for ongoing technical product and AI guidance and support can still access that through Red Hat Technical Account Management.

A dedicated TAM with specialized knowledge—both in Red Hat products and in overall AI expertise—will provide them with ongoing operational and advisory guidance to help them maximize their Red Hat investments both now and far into the future as AI technology continues to evolve.



A roadmap to AI success that meets their needs.



A foundation of technology and skills to support that roadmap.



The capabilities to automate, operationalize, and scale Red Hat OpenShift AI and Red Hat Enterprise Linux AI.

This will put organizations in an ideal position to achieve long-term success and build significant business value as they continue to innovate with AI platforms and AI-powered applications in both their own internal operations, and the products and services they deliver to their end users.

The ultimate goal of Red Hat Services is to help customers become self-sufficient as they continue their ongoing AI

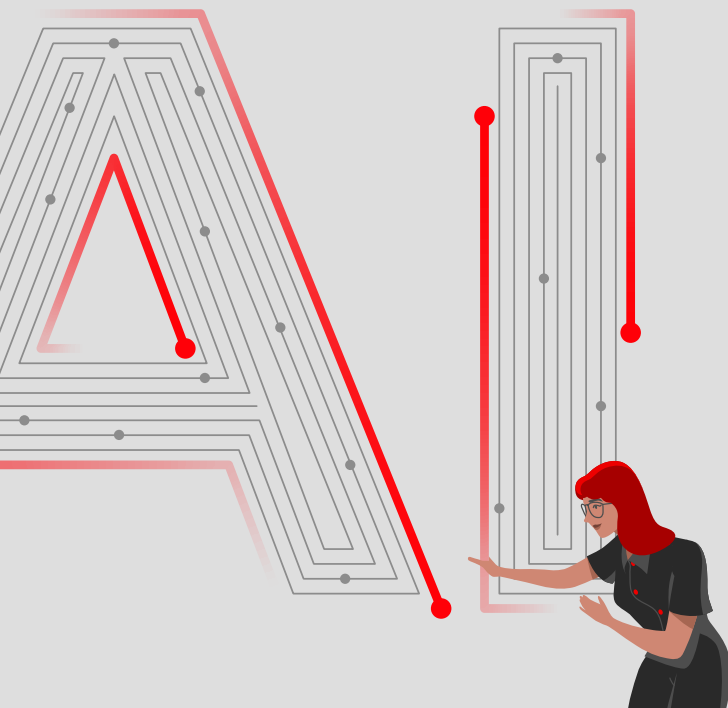
Myth:
AI is not secure.

Truth:
AI is no more secure or less secure than any other technology; it’s what you do with that technology and how you do it that defines its levels of security. Determining who has access to an organization’s AI models and data sets, and reinforcing those privacy measures with data pipelines and automation workflows, is key to how security-focused an organization’s use of AI is.

Start your Red Hat AI journey

Is your organization ready to begin its AI journey but is unsure where to get started?

Are you looking for product expertise and guidance, skills training and validation, and technical support to help you reach your AI goals?



Speak to a [Red Hatter](#) to learn more about how Red Hat Services can help you navigate your AI journey.

Or [book a no-cost discovery session](#) with Red Hat Services to identify your goals and determine recommended next steps as part of a project approach that addresses your organization's unique challenges and needs.



About Red Hat

Red Hat helps customers standardize across environments, develop cloud-native applications, and integrate, automate, secure, and manage complex environments with award-winning support, training, and consulting services.

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