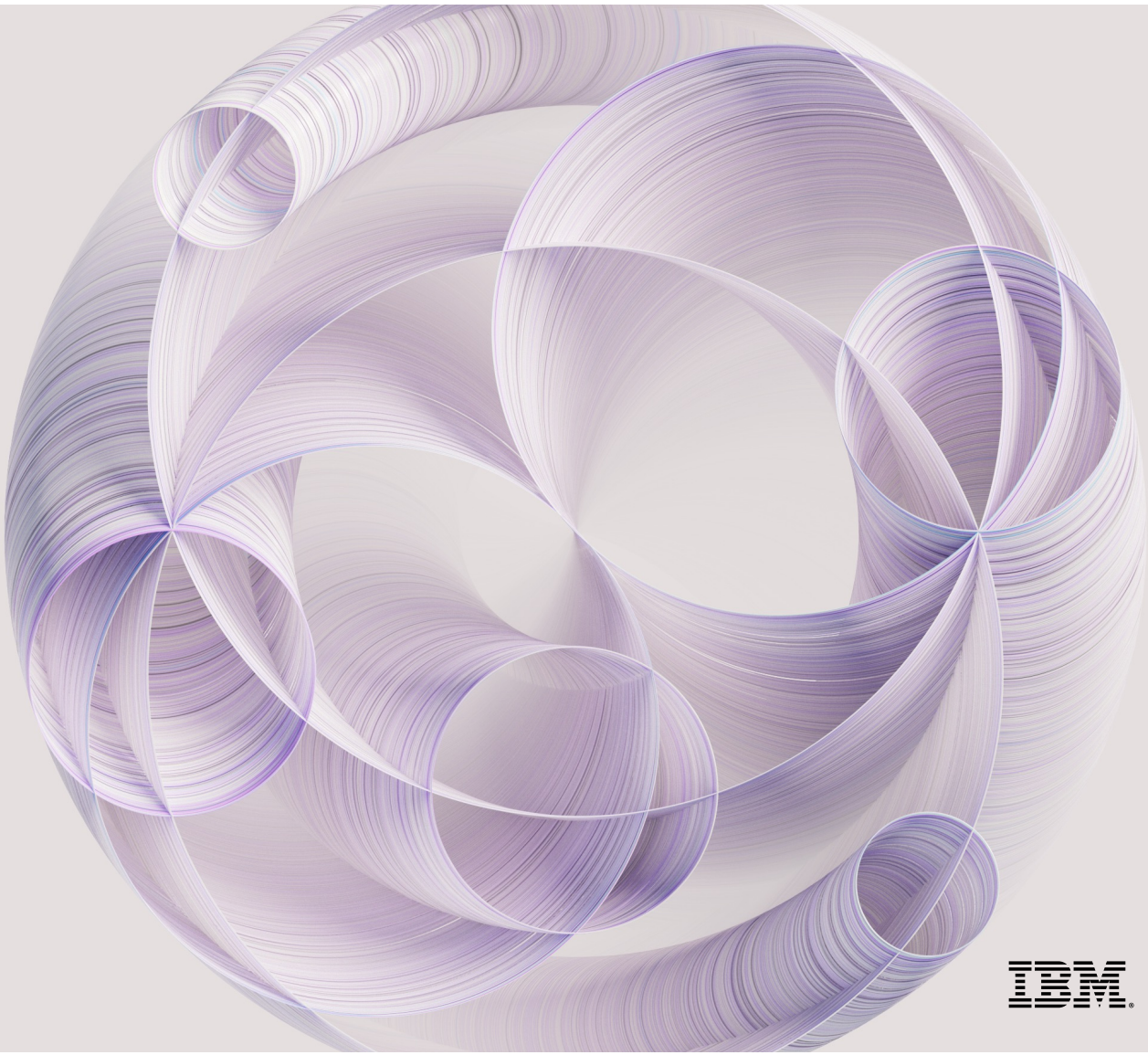
Let’s put AI to work



watsonx™

IBM

AI-powered pair programming with IBM **watsonx** Code Assistant

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IBM

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Today

Let’s elevate

developer mindset, experience,
& productivity as critical business goals

Let’s study

some features & use cases of how AI
can improve software development &
automation adoption across the IT
landscape

Let’s create

confidence & enthusiasm in how IBM
watsonx Code Assistant™ can help you
drive innovation & retain talent

On developer experience

IBM POV:
Four core principles to tailor generative AI for enterprise

Open

→ Based on the best AI and cloud technologies available.

→ Giving access to the innovation of the open community and multiple models.

Targeted

→ Designed for targeted business use cases, that unlock new value.

→ Including curated models that can be tuned to proprietary data and company guidelines.

Trusted

→ Offering security and data protection.

→ Built with governance, transparency, and ethics that support increasing regulatory compliance demands.

Empowering

→ On a platform to bring your own data and AI models that you tune, train, deploy, and govern.

→ Running anywhere, designed for scale and widespread adoption to truly create enterprise value.

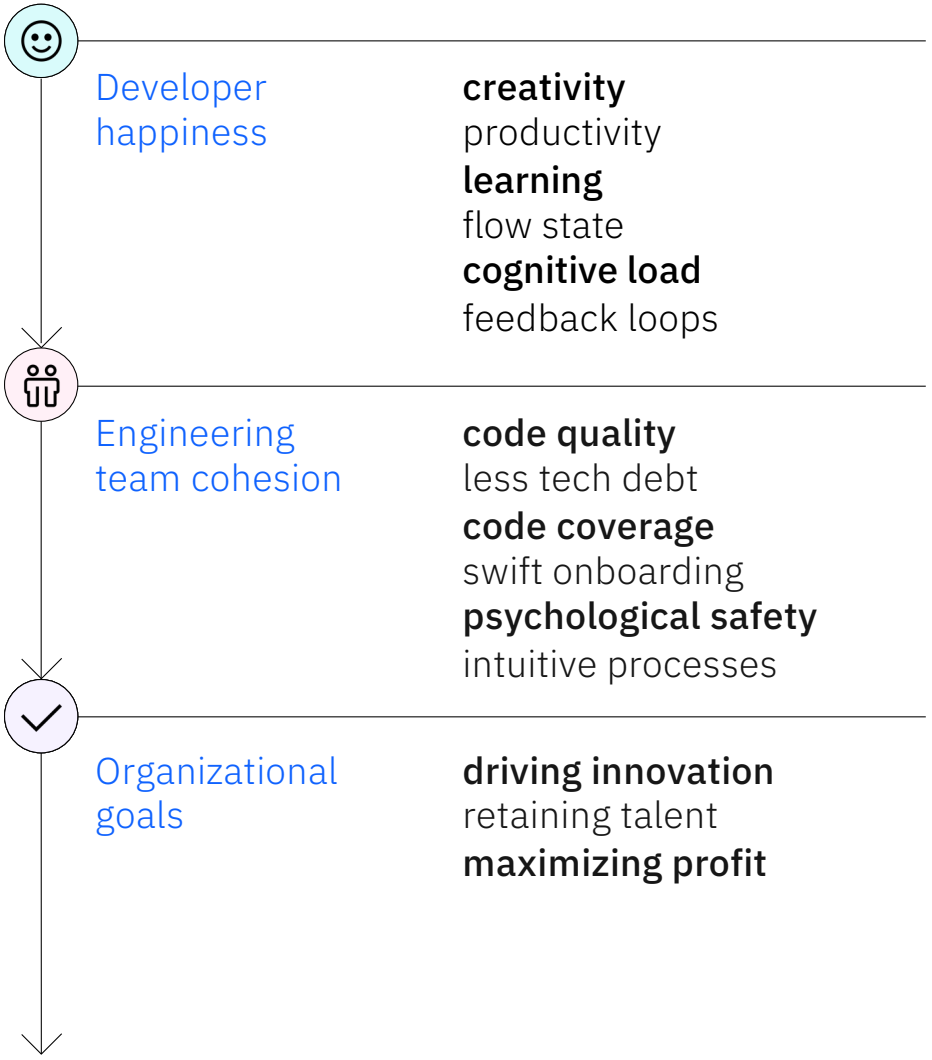
On developer experience

Pair programming is a highly effective method in software development. It enables developers to achieve **focus, flow, and joy** while fostering key developer experience ideals like those listed at right.

Enhancing developer productivity is vital for organizations aiming to elevate customer and employee experiences while improving system efficiency. The goal is to expedite the creation of optimized, self-documenting code aligned with industry best practices, allowing developers to solve bigger problems.

"Locality & Simplicity," "Focus, Flow, & Joy," "Improvement of Daily Work," "Psychological Safety," and "Customer Focus" are the five ideals from *The Unicorn Project* by Gene Kim.

We can connect the dots between...



...and how IBM watsonx Code Assistant supports these outcomes.

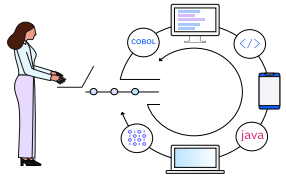
On IBM watsonx Code Assistant

IBM watsonx Code Assistant

Enterprise ready AI for Code solutions to address skills gaps and increase productivity for targeted use cases

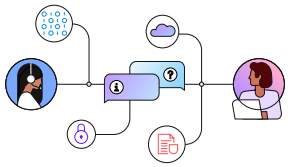
Purpose built with state-of-the-art IBM Granite code model

- Trained on highly curated data with a comprehensive understanding of programming languages and syntax
- Consistently outperforms code models above its weight class on code generation, explanation, and error detection
- Optimized and pre-trained to support domain specific languages like COBOL, Ansible, and Java



Designed to support the enterprise application lifecycle

- Accelerates application lifecycle using generative AI combined with best-of-breed, industry-leading automation solutions
- Streamlines complex and time consuming SDLC tasks for maximum time-to-value while maintaining code integrity and quality
- Deep integration and interoperability for optimal, end-to-end developer experience for speed and agility

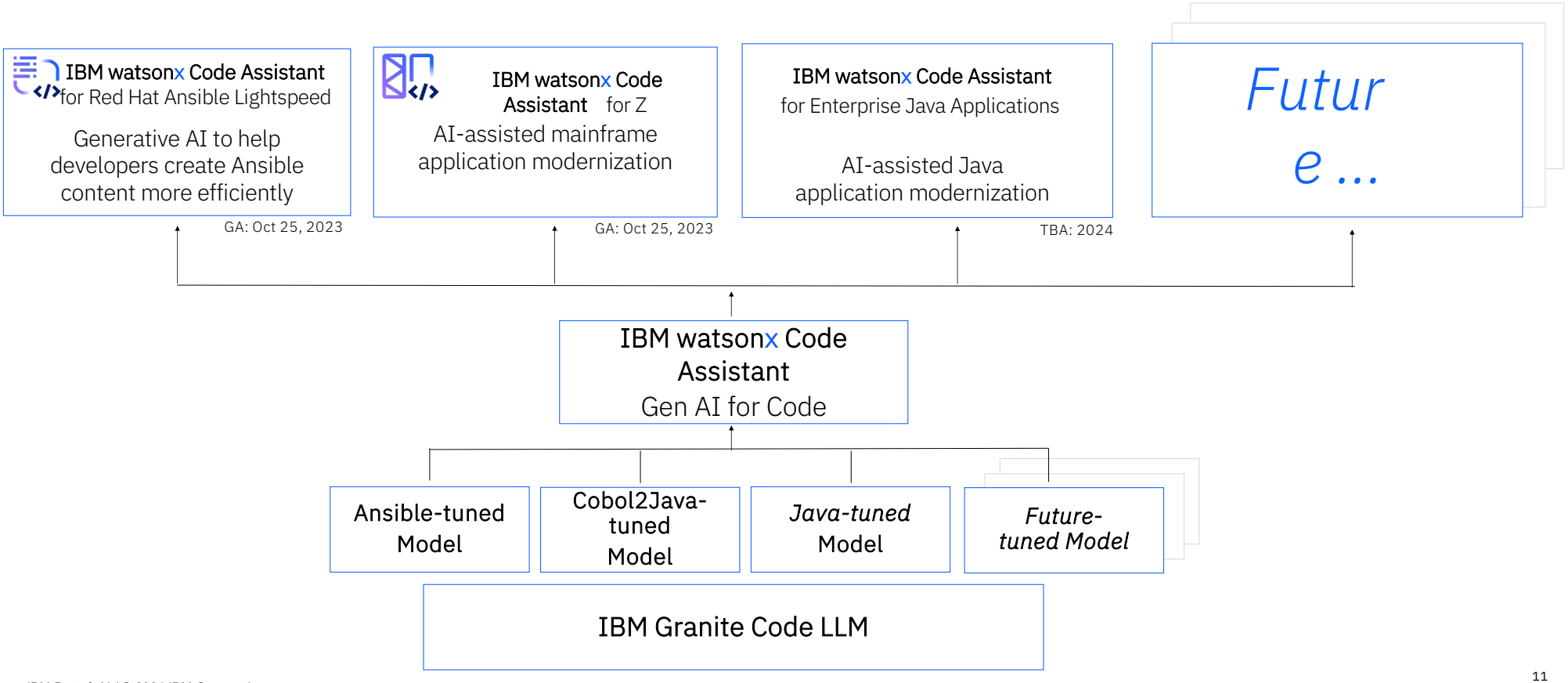


Trustworthy and transparent

- Rigorous data governance process with a focus on data provenance, risk and compliance
- Built-in content matching tool that shows potential similarity to data sources
- IBM indemnifies clients against 3rd party IP claims against IBM-developed foundation models

IBM watsonx Code Assistant Product Family

Enterprise ready AI for Code solutions to address skills gaps and increase productivity for targeted use cases



IBM watsonx Code Assistant for Red Hat Ansible Lightspeed

Accelerate Ansible Playbook Creation with Generative AI

IBM watsonx Code Assistant for Red Hat Ansible Lightspeed helps automation teams create, learn, and maintain Red Hat Ansible Automation Platform content more efficiently.

Objectives

Increase productivity for automation developers

Expand who can create automation content

Extend trust in the automation content

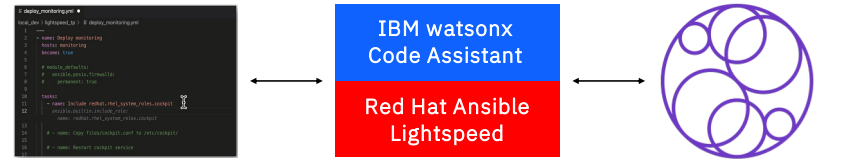
Benefits

Accelerated time to value

Reduced learning curve

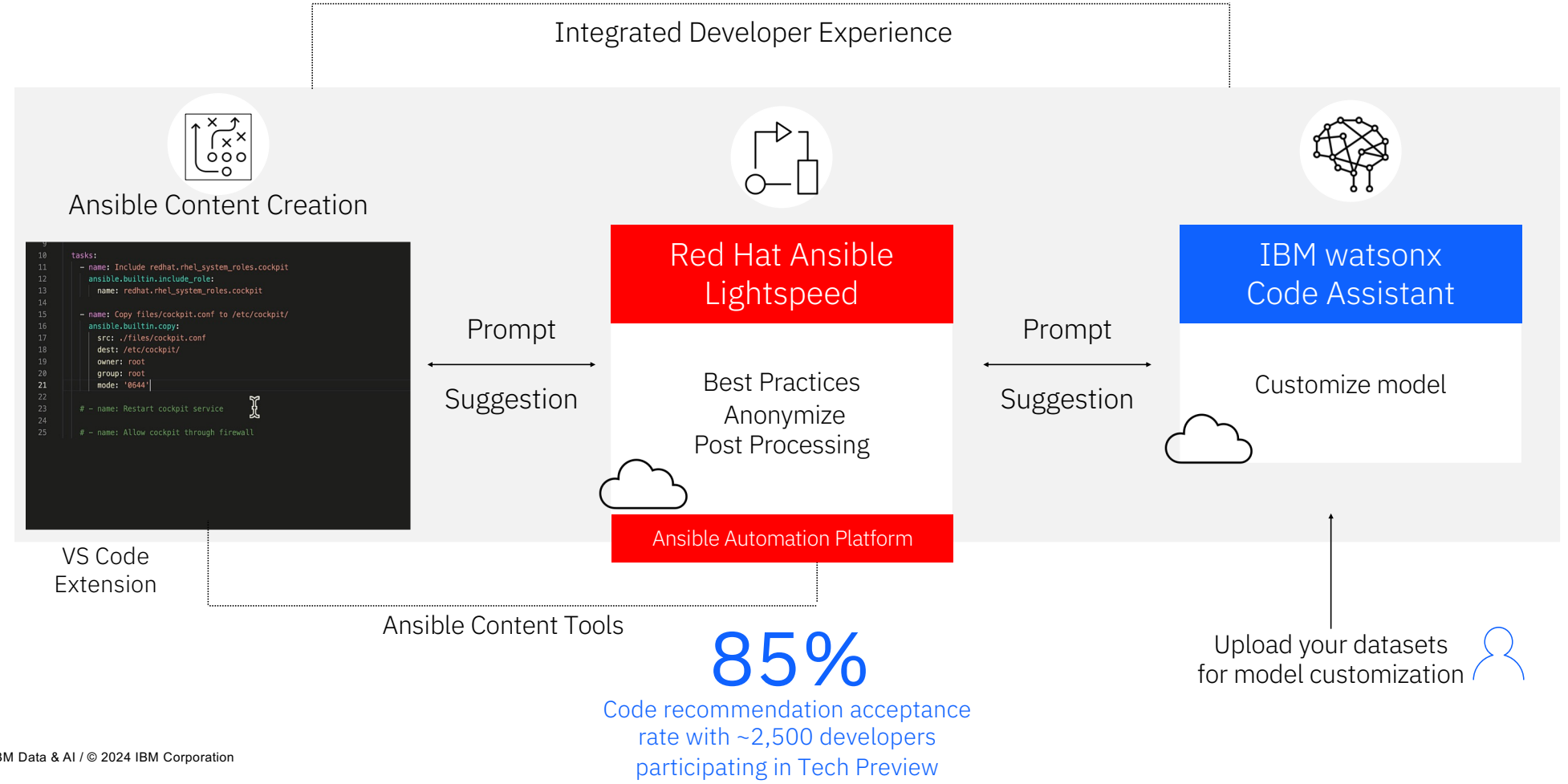
Enhanced content quality

AI-powered Ansible content generation



- ✓ *Generate* high-quality Ansible content with IBM's purpose-built Granite code model
- ✓ *Accelerate* automation scripting with natural language to Ansible AI-assisted tasks
- ✓ *Personalize* content generation via prompt tuning of IBM Granite code model
- ✓ *Match* content with potential sources for trust and transparency
- ✓ *Integrate* with popular IDEs starting with VS Code

IBM watsonx Code Assistant for Red Hat Ansible Lightspeed helps automation teams learn, create, and maintain Red Hat Ansible Automation Platform content more efficiently

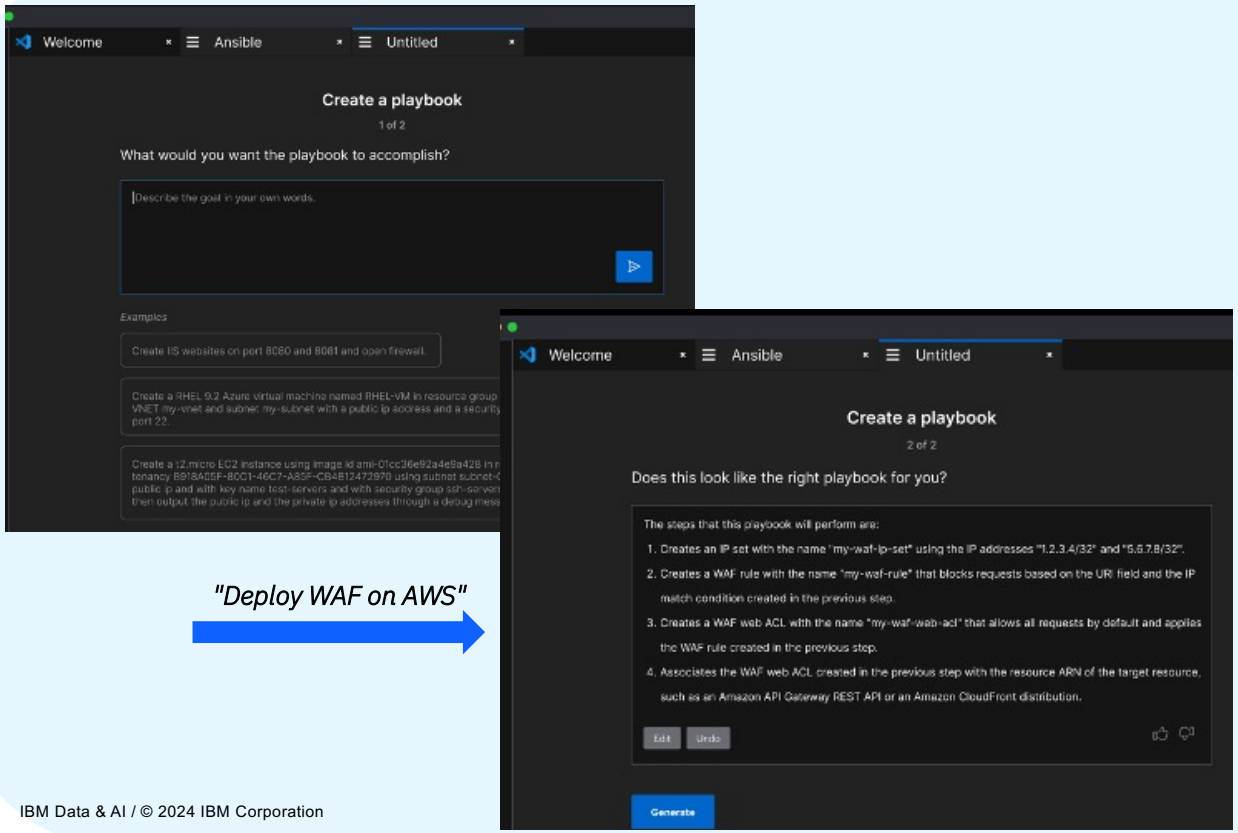


85%

Code recommendation acceptance rate with ~2,500 developers participating in Tech Preview

New Feature 2Q: Playbook Generation* (SaaS First)

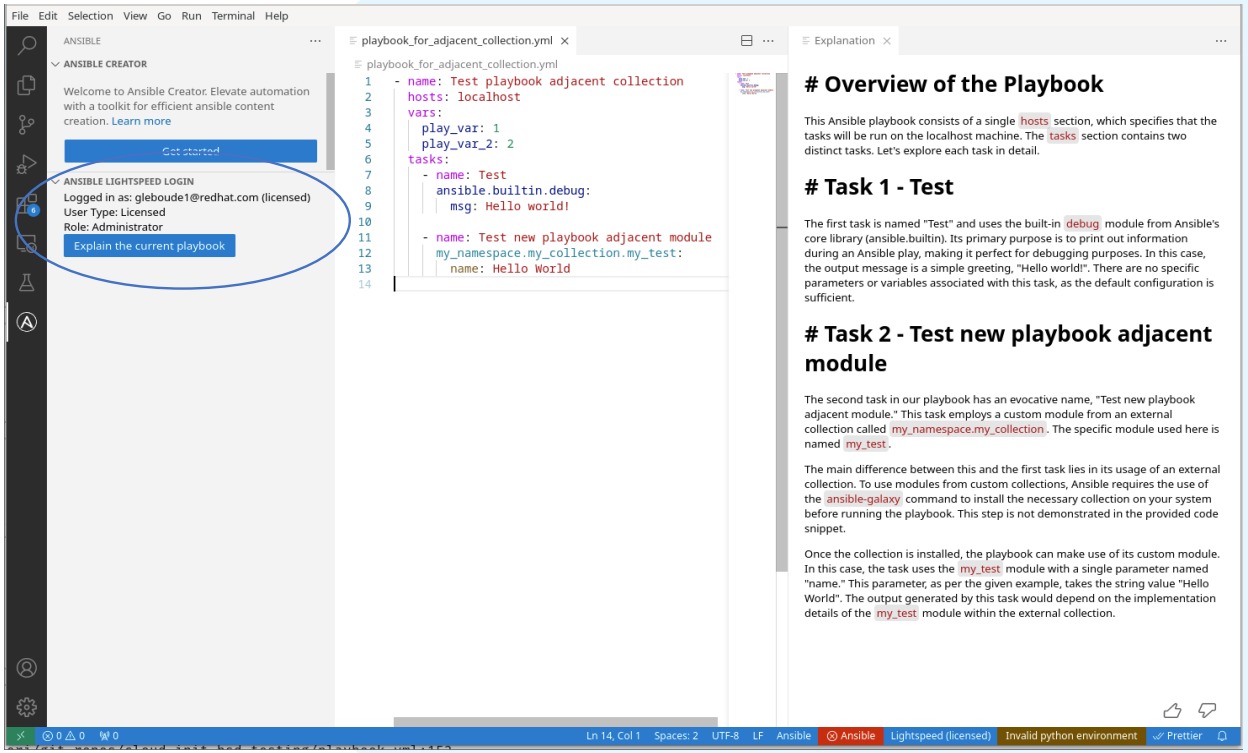
Leverage a chat-style experience to generate and explain Ansible content from single task prompts



- **Reduce the time** getting started in Ansible Playbook creation
- **Chat interface** returns an outline of the Ansible Playbook and Explains Playbook that generated
- **Simplifies the approach to creating and understanding** the generated Ansible content for new developers

*Available in SaaS first deployment, availability for on prem TBA

New 2Q Feature: Playbook Generation and Code Explanation (Available on SaaS First)



- Accelerate and Democratize: Ansible developers can start using the platform right away without needing

Use cases and personas

Problem statements and use cases WCA can address

The information to the right outlines different types of client needs and challenges—and the use cases for each—where IBM watsonx Code Assistant can be used as a solution.

Client use case

"We spend too much time building test databases and loading sample data. We need to spend more time on actual testing."

Problem Statement

A database testing lead needs a quick, automated, and consistent way to stand up test databases. They are currently created only 1x/month, they require housekeeping and pruning, and they take time away from testing tasks.

IBM use case

Ansible content generation (Server administration)

Problem statements and use cases WCA can address

The information to the right outlines different types of client needs and challenges—and the use cases for each—where IBM watsonx Code Assistant can be used as a solution.

Client use case

"Our senior engineers spend a lot of time teaching our junior developers how to automate the right way. How might we use their time better and accelerate onboarding?"

Problem Statement

An engineering lead needs a way to increase adoption of her company's leading automation practices among her junior engineers without taking up too much of her senior engineers' time. She wants to free capacity without any increase in onboarding time for new hires.

IBM use case

Ansible model customization

Problem statements and use cases WCA can address

The information to the right outlines different types of client needs and challenges—and the use cases for each—where IBM watsonx Code Assistant can be used as a solution.

Client use case

"I need to automate the patching of an IBM i server."

Problem Statement

An sysadmin knows a lot more about IBM i than he does about Ansible. He heard he can start simple and then get have the playbook explained to him.

IBM use case

Playbook Generation & Explanation

Problem statements and use cases WCA can address

The information to the right outlines different types of client needs and challenges—and the use cases for each—where IBM watsonx Code Assistant can be used as a solution.

Client use case

"Our network engineering team is growing, and we need to onboard new engineers to use the latest automation approaches."

Problem Statement

A network engineer needs a way to automate the configuration of her company's Cisco network devices because they are currently using shell scripts to perform the task, which is an imperative approach. She wants to use a declarative approach and align better with the Operating Systems team that uses Ansible.

IBM use case

Ansible content generation (Network management)

What would you like to see?

Client use case	IBM use case
“We spend too much time building test databases and loading sample data. We need to spend more time on the actual testing.”	Content generation (Server administration)
“Our senior engineers spend a lot of time teaching our junior developers how to automate the right way. How might we use their time better and accelerate onboarding?”	Model customization
“I know more about IBM i than I do about Ansible.”	Playbook generation & explanation
“Our network engineering team is growing, and we need to onboard new engineers to use the latest automation approaches.”	Content generation (Network management)

Show and tell

What’s new in IBM watsonx Code Assistant for Red Hat Ansible Lightspeed

IBM watsonx Code Assistant for Red Hat Ansible Lightspeed

Product Roadmap timeline 2024

1Q' 24	
Intended Capability	Outcome
IBM Cloud Trial Experience (✅ Shipped)	Users can experience the capabilities of watsonx Code Assistant for Red Hat Ansible Lightspeed at no charge based on usage limits
Model Tuning & Customization (✅ Shipped)	Create custom Ansible recommendation models
Productivity (Admin) Dashboard on Red Hat Ansible Lightspeed Portal (✅ Shipped)	Organizations can view usage efficiency metrics for their Ansible developers

2Q' 24	
Intended Capability	Outcome
Playbook Generation (Phase 1) Release on IBM Cloud first	Chat-style experience to generate and explain Ansible content from single prompt tasks.
On-Premises Deployment Date: June 12	Make IBM watsonx Code Assistant for Red Hat Ansible Lightspeed available in an on-premises setup.
Expand WCA service to Frankfurt MZR	Data Center expansion to Frankfurt

2H' 24	
Intended Capability	Outcome
Playbook Generation (Phase 2)	Expand on Ansible Playbook content recommendations and explanations.
Playbook Generation (On-Premises)	Release Playbook Generation and Explanation feature for on-premises setup
Tuning enhancements for Playbook generation	WCA admin should be able to tune the WCA model to improve Playbook generation inferences
Ansible content description and documentation	Find existing Ansible content instead of writing from scratch
Expand WCA service to Japan and London MZR	Data Center expansion to Japan and London

Roadmap is subject to change

Calls to action

Next steps

Step 1

See IBM watsonx Code Assistant in action

Ask your sales representative to visit the nearest IBM Innovation Studio.

Step 2

Explore the technical preview

Explore the possibilities of the watsonx Code Assistant preview.

See it for yourself →

Step 3

Conduct a pilot

Deliver results based on selected use cases using generative AI watsonx capabilities.