

Extend your AI capabilities with watsonx

IBM watsonx.ai is a studio of integrated tools for working with generative AI capabilities that are powered by foundation models and for building machine learning models. IBM watsonx.ai provides a secure and collaborative environment where you can access your organization's trusted data, automate AI processes, and deliver AI in your applications.

You can accomplish the following goals with IBM watsonx.ai:

- **Build machine learning models** by using open source frameworks and code-based, automated, or visual data science tools.
- **Experiment with foundation models** using prompts to pre-trained foundation models to generate, classify, summarize, or extract content from your input text. Choose from IBM models or open source models from Hugging Face.
- **Manage the AI lifecycle** and automate the full AI model lifecycle with all the integrated tools and runtimes to train, validate, and deploy AI models.

Relationship with Cloud Pak for Data

IBM watsonx as a Service and Cloud Pak for Data as a Service have similar platform functionality and are compatible in many ways. The watsonx platform provides a subset of the tools and services that are provided by Cloud Pak for Data as a Service. However, watsonx.ai on watsonx extends the functionality of the common toolset to enable working with foundation models and generative AI.

Both platforms provide services for data science and MLOps use cases:

Watson Studio
Watson Machine Learning
AI governance

However, these services for watsonx.ai on the watsonx platform include features for working with foundation models and generative AI that are not included in these services on Cloud Pak for Data as a Service.

Cloud Pak for Data as a Service also provides services for these use cases:

Data integration
Data governance

Data science and AI tools

Both platforms provide a common set of data science and AI tools. However, on watsonx, you can also perform foundation model inferencing with the Prompt Lab tool or with a Python library in notebooks. Foundation model inferencing and the Prompt Lab tool are not available on Cloud Pak for Data.

The following table shows which data science and AI tools are available on each platform.

| Tool | On watsonx | On Cloud Pak for Data |
|--------------------------|-------------------|------------------------------|
| Prompt Lab | ✓ | |
| Synthetic Data Generator | ✓ | |
| Prompt lab | ✓ | |
| Synthetic Data Generator | ✓ | |
| Data Refinery | ✓ | ✓ |
| Visualizations | ✓ | ✓ |
| Jupyter notebooks | ✓ | ✓ |
| Federated Learning | ✓ | ✓ |
| RStudio IDE | ✓ | ✓ |
| SPSS Modeler | ✓ | ✓ |
| Decision Optimization | ✓ | ✓ |
| AutoAI | ✓ | ✓ |
| Watson Pipelines | ✓ | ✓ |

Which one should you use?

multiply the impact of AI across your organization, then watsonx is a good option. If you are looking for a platform that can help you to manage your data and build AI applications, then Cloud Pak for Data is a good option.

For details on watsonx, including how you can try this technology, see [watsonx](#).

Ultimately, the best way to decide which platform is right for you is to evaluate your needs and requirements and then speak with an IBM representative.

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